

# MANUFACTURERS' RECORD.

[Name Patented 1889.]

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXIV. No. 23.  
WEEKLY.

BALTIMORE, JANUARY 5, 1894.

\$4.00 A YEAR.  
SINGLE COPIES, 10 CENTS

## DEMOCRATIC DOCTRINE ON FREE COAL AND ORE.

Governor MacCorkle, of West Virginia, and Ex-Senator Henry G. Davis, President of the West Virginia Central Railroad, Discusses Free Coal, Which Involves the General Principle of Free Southern Products.

Governor MacCorkle Quotes From Former Speeches of Hon. Wm. L. Wilson, Chairman of the Ways and Means Committee, Showing the Unfairness of Free Coal and How it Would Injure the South.

If "Free Coal" Was Undemocratic, Unfair to the South and a Menace to its Prosperity, as Proclaimed by Mr. Wilson a Few Years Ago, Why Are Not These Things True Today?

The soundness of the democracy of Governor MacCorkle, of West Virginia, cannot be questioned, and hence his views on the free-coal question—and, of course, the free-coal question involves the whole principle now at stake of free Southern iron ore, pyrites, lumber, wool, etc., while New England's manufactured goods are protected—are of great interest to every man who desires to see the South prosper. For this reason the MANUFACTURERS' RECORD recently asked the Governor for a full expression of his views on this subject from a democratic standpoint. His interview, which is an enlargement and careful revision of one that appeared in the Huntington Advertiser, presents a very clear statement of the whole case. He shows that coal has always paid a duty as a revenue measure, and that even under the Walker tariff this duty was \$1.30 a ton. Governor MacCorkle quotes from a speech made several years ago by Hon. Wm. L. Wilson, the father of the Wilson bill, in which he vigorously opposed free coal. This extract is worth repeating here:

*As I have said, I favor a bill for the reduction of taxes. Where this bill departs from its general scheme of merely reducing taxes and seeks to enlarge the free list, it bears unbecomingly and, as I believe, unjustly upon some of the interests of my own State. To take any one great industry and transfer it suddenly to the free list is to hold it tributary to all the rest, while depriving it of any share in the common "protection." Whatever reduction is made should be made so gradually as not to wreck, to disturb or to alarm any of our great industries, and this return to a free tariff ought to be made by even progress and on a scale of justice to all. This bill would permit reciprocal free coal with Canada, a provision I think little apt to be carried out, and free coal from England. Coal is now free, so far as the foreign and coastwise trade is concerned, having otherwise a duty of seventy-five cents per ton, which is less than 20 per cent. ad valorem, under a tariff whose general average is over 40 per cent. Should we proceed to the consideration of this bill by sections, I shall present to the committee such facts and figures as will bear fully upon this question, and I have every confidence—indeed, I may add, I have every assurance that can now be given—that this inequality and discrimination will be corrected, and the interests of my own State share only in the general fortune of all.*

The MANUFACTURERS' RECORD commends to its readers Governor MacCor-

kle's convincing arguments against the free-coal, free-ore and other free features of the Wilson bill.

In reply to the question whether his position had been correctly reported in the discussion some time ago, just after he appeared before the ways and means committee, Governor MacCorkle said:

Absolutely not, and that is the complaint I have against the newspapers. They have accepted the partisan dispatches of the Associated Press as my statement and have published Mr. Reed's own statement as my position. Now, when democrats accept Mr. Reed's statement as to any democratic location, we had better quit business. The papers have not waited to see what really transpired, but have taken his statement as to my position. Nothing can be more unjust to me and my party. To show you that the newspapers have acted hastily in the matter and without proper information, I will say that I have nine absolutely different statements as to what I said. A republican correspondent sent out the statement in order to help his party, and some of the press of my State, without investigation, took it up.

"But, Governor, it is said that you demanded that the tariff be kept on coal, and is not that contrary to the democratic doctrine?"

"Yes, I asked that the tariff be retained on coal, and that has been the democratic doctrine for 100 years. Why, I have been informed by one of the editors that the tariff on coal was undemocratic. Right in the face of democratic teaching and principle I am called a heretic to democratic principle. If tariff on coal is heresy, democratic principles have changed in a very short time. Let us look at the cold facts of our party history and not rely on loose statements. The first tariff of 1789 imposed a duty on bituminous coal of fifty cents per ton. In 1790 it was eighty-five cents. From that time until 1842 it was never less than \$1.40 per ton, and part of that time it was \$2.80 per ton. In 1842 it was \$1.75 per ton. Now we come to the great Palladium of democracy—the very fountain-head of our party principles on the tariff, the tariff of Robert J. Walker, the tariff of 1846, a purely revenue tariff, to which every democrat refers as embodying the true idea of democracy; a tariff of which Senator Allison, no friend of democracy, said: 'The tariff of 1846, although confessedly and professedly a tariff for revenue, was, so far as regards all the great interests of the country, as perfect a tariff as any we ever had.' The Walker tariff placed coal on

the list at \$1.30 per ton. Is my democracy to be criticised when I am asking for coal a little more than one-half of the duty given by the Walker tariff, and this, too, in the face of the fact that the average of the present tariff laws is very much higher than under the Walker tariff? In other words, with an average tariff of about 20 per cent. under the Walker tariff act, coal was \$1.30 per ton, whilst under our present tariff, with an average dutiable tariff of about fifty cents, coal is seventy-five cents per ton, with a rebate which makes a real duty of about twenty cents. Now, this is the great Walker tariff of 1846, under which we have fought our battles for nearly fifty years. This tariff continued at about this rate until 1861, when it was reduced to \$1.00, to admit foreign coal in time of war, and in 1873, when other articles on the dutiable list were only 10 per cent., coal was reduced 40 per cent., or down to seventy-five cents per ton. The unfair reduction was made by the influence of New England."

"Well, Governor, what has been the late history of the democratic party on the coal tariff?"

"Even more pronounced than before the war. In 1878, when the democrats got control of the House, Fernando Woods was made chairman of the ways and means committee and reported the Woods bill, which placed a tariff on coal of seventy-five cents. This bill was defeated on account of other controversies, but was regarded as democratic sentiment. In the Forty-eighth Congress Mr. Morrison was made chairman of the ways and means committee, and reported a bill placing coal on the free list. This, as much as anything, sent it to its fate, and in a democratic House this bill was defeated and utterly refused and discredited as the doctrine of the democratic party. The member from my district voted against it, came back home, made his campaign on his vote and speech against free coal and was triumphantly elected.

"How about the Mills bill? What change did it make in coal?"

"Not a cent of change in coal. It retained coal at seventy-five cents; just what I asked the ways and means committee to do the other day. This was done, although a change was made on other articles on the dutiable list to such an extent that the bill was called a free-trade bill. The Mills bill was endorsed by the Democratic National Convention and was the tocsin of the party; we made our campaign on it and in every democratic campaign it has been lauded as democratic doctrine, and every democratic orator carried it with him as his handbook of our party. The Mills bill had coal on the tariff list at seventy-five cents. If seventy-five cents tariff on coal was good doctrine then, is it not good doctrine today? To intensify this statement, I will call to mind that when Mr. Mills was speaking to the assembled multitude in the city of Charleston, in my State, a miner stood up and asked him if his bill was for free coal. He replied vigorously, and many will remember the reply, that 'it did not touch that article, but left it upon the list as it had been heretofore.' Hundreds will recollect this state-

ment. Has a change taken place in our principles in this short time? Surely on the question of consistency I cannot understand why coal on the tariff list in the Mills bill, and free coal in the present bill, could be explained to the people. We believe it could not. I challenge any democrat to point to me one line of democratic history asking for free coal. I am on a solid foundation of democratic precedent and usage, and those who cry for free coal do not know the history of their party. I am for reform and absolutely upon the Chicago platform and do not propose to be called a heretic to democratic principles of a hundred years. Why, a quarter of a century ago, when General Grant was a candidate for the presidency, outside of the great war issue, one of our issues against him was that he was for free coal, and this issue was made against him because of some loose statement made by him for free raw material. In every campaign since our party leaders have made vigorous war on the free-coal views of the republican leaders. In the Hayes and Wheeler campaign our campaign literature is full of denunciation of the vice-presidential nominee because of his vote for free coal. I hold in my hand the campaign book of our party, setting up and denouncing Blaine for his vote for free coal. When General Logan came to this State the State was flooded by our national committee with pamphlets denouncing him for his vote for free coal and appealing to the miners of our State to vote against the man who would rob them of their honest labor. The streets of my city were absolutely flooded with that democratic literature, and Senator Kenna, when alive, walked up and down the streets and told every democrat whom he met that Logan had voted for free coal, and that was largely the issue against him; and when Senator Hale last summer came to my city to make a speech, he had to walk over a street literally flooded with democratic documents denouncing his vote for free coal. I hold in my hand the democratic handbook denouncing Morrill, Hale, Hawley, Blaine, Logan, Wheeler, Frye and other great republican leaders for their free-coal votes. Have our declarations been mere clap-trap to fool the miner with? Am I now to be criticised for following the democratic principles and precedents, and for not lying down with Logan and Hale and other great republican leaders whom we have been denouncing all these years? When I stated this history to a distinguished democratic editor who seemed ignorant of his party's history on the question, he said in reply that our criticisms of the republicans who voted for free coal was to get the miner's vote. I indignantly deny this statement, and say that in denouncing republican free coal my party was in dead earnest and meant what it said. I deny the statements imputed to me by the partisan press; deny that I appealed for protection, and say that what I did say in that direction was this: 'That with the democratic precedent before us we could not hope to keep this State democratic upon a platform and campaign of free coal.' My position is just this: The democratic party is pledged to correct the

nequalities and undue burdens of the tariff. Is it correcting the inequalities of the tariff to place duty on the other products of the country and place our only great product on the free list? I am a tariff reformer, absolutely so, and when it is the theory of the party that the expenses of the government should be paid by the tariff, I want my State to have her fair share of the tariff. I appeal to the 16,000 miners living in our hills, earning their bread by the sweat of their brow. They are taxed the very highest price upon the tools they dig their coal with; on the woolen goods that cover their nakedness; upon their scant furniture; upon everything they eat; how can you explain to them when you take away from them the scant revenue derived from the product of their labor? I appeal to every farmer who has coal underlying his home and which he expects to support him when he can no longer work. I appeal to the merchants and business men who make their living by this great industry. Is it right or just that when this great government has to raise nearly \$400,000,000 by tariff duty, that you are to be left out? We are willing to take a fair and honest reduction, as other products are, no more, no less. Today the tariff averages nearly 50 per cent. on everything else; coal with its rebate has only about one-half that amount.

"This is directly in the line of the tariff for revenue only. If coal under the Walker tariff at \$1.30 a ton was for revenue, surely under our present high list at seventy-five cents a ton is still a tariff for revenue. We have made New England rich by paying her tariffs for her, and today it is New England who wants her free coal to aid her to make cheaply her manufactures and sell them high to us. She is clamoring for free coal. She is pushing the free-coal bill. Will the democratic party be led blindly into her toils? The New England delegation, as it has voted, will again vote for free coal, and it is the narrow and selfish doctrine of New England which demands protection for her products and denies a fair revenue tariff on anything else. In looking over the democratic book for 1888 I was struck with the following paragraph: 'On March 16, 1871, Mr. Blaine said on the floor of the House to B. F. Butler: "I was in favor of the repeal of the coal tariff, and the gentleman was not." "Maine delegation solid." I have not discussed the economic aspect in reference to coal; I have only discussed the democratic doctrine, and upon the democratic doctrine I plant myself and say that with its record before it the democratic party cannot make a campaign on free trade in coal. With 16,000 miners in this State, it would be a ruinous policy to the party and a departure from every one of its precedents. I have not plead for protection, and say that when I asked for seventy-five cents a ton on coal I am only demanding the duty which the revenue-reform policy of the democratic party demands, for certainly if \$1.30 was revenue under the great Walker tariff with 20 per cent. duty, seventy-five cents is no more than a tariff for revenue only with coal at its present tariff. In claiming her fair share of the revenue tariff West Virginia only claims what rightly belongs to her, and in criticising the governor of this State for his position the press of the State has not differentiated between protection and tariff for revenue. To show the injustice which the press is doing to its party, I wish to add that if the present democratic House retains coal as it has been for all these years, and Hon. William L. Wilson, the chairman of the present ways and means committee, who was then on the Mills ways and means committee, does not change his mind, and he is not likely to change his opinions in four years (for he then voted for coal at seventy-five cents a ton) how will the present press comments be justified in case the democratic party retains coal on the list as I have above

stated? Should it not wait until the action of Congress is taken? Would it not be best to see whether I am stating what will be the democratic doctrine?

"Reasoning from the long-time position of the distinguished chairman of the ways and means committee, my position is exactly correct. In the Morrison bill debate, alluding to free coal, Mr. Wilson used the following language:

"As I have said, I favor a bill for the reduction of taxes. Where this bill departs from its general scheme of merely reducing taxes and seeks to enlarge the free list, it bears unevenly and, as I believe, unjustly upon some of the interests of my own State. To take any one great industry and transfer it suddenly to the free list is to hold it tributary to all the rest, while depriving it of any share in the common 'protection.' Whatever reduction is made should be made so gradually as not to wreck, to disturb or to alarm any of our great industries, and this return to a peace tariff ought to be made by even progress and on a scale of justice to all. This bill would permit reciprocal free coal with Canada, a provision I think little apt to be carried out, and free coal from England. Coal is now free, so far as the foreign and coastwise trade is concerned, having otherwise a duty of seventy-five cents per ton, which is less than 20 per cent. ad valorem, under a tariff whose general average is over 40 per cent. Should we proceed to the consideration of this bill by sections, I shall present to the committee such facts and figures as will bear fully upon this question, and I have every confidence—indeed, I may add, I have every assurance that can now be given—that this inequality and discrimination will be corrected and the interests of my own State share only in the general fortune of all."

"These views he has subsequently reiterated on the stump time and again, and under his teachings, so well expressed above, I have formed my opinions. He has given no indication of change. Why then criticize me.

"And now I say, and ask democrats to recall what I do say, that at this time next year democratic orators will be talking this doctrine and democratic doctrine to the miners of West Virginia. Will any sensible man tell me that the democrats can carry this State on a free-coal platform? I care not for the carpings of a few newspapers. I know as well as they what the sentiment among the mass of the people is, and say that when I went to Washington it was of my own free will, knowing exactly what I was doing, and I believe that the doctrine will be maintained by the party in its coming campaign. I have not discussed the economic question, but will ask just one moment for that, and see how it effects West Virginia.

"The whole absolute prosperity of this State is founded on coal. We have the best coal and more coal than any State in the Union. We have been engaged for twenty-five years in a conflict with Pennsylvania for coal supremacy, and just now when we are seeing light shall we adopt a free-coal platform and have capitalists wait for another five or ten years to see what the effect will be, before they will invest in our mines and in our hills? Some have said they can see no difference between Carnegie & Co. asking for protection and the West Virginians asking for a revenue tariff for their coal. I repeat that the manufacturers have two, three and four times as much tariff as we have, and we are only asking what rightly belongs to the State when we ask for the pitiful revenue tariff of seventy-five cents per ton on coal. The miners are getting just as little as they can live on. There is not an over-rich coal corporation in this State. They are living just as close as they can and scarcely making any dividends. The railroads are transporting coal cheaper than was ever known before, and they are cutting down forces and putting their laborers as low as

possible, and can they stand a reduction? I do not say, nor have I ever said, that free coal would be absolute ruin, but I do say that it is problematical, and I don't care to risk the uncertainty. Free coal will not cheapen coal to the consumer. The anthracite coal settles the consumer's market. It will allow the bringing in of Nova Scotia coal. It will allow the continuance of English and Australian coal on the Pacific coast, and with the Nicaraguan canal built, West Virginia should absolutely dominate the Pacific coast with its present tariff, and none can compete there with the present tariff. Are you willing to take the risk? Bituminous coal is not a monopoly. I have seen the prospectus of the Dominion Coal Co., Limited, the Nova Scotia combination controlled by New England people, wherein they mention immense dividends, and where the great house of Kidder, Peabody & Co. says the coal of Nova Scotia with the American tariff off will be sold in the United States. We do know that it is today competing in the New England markets with our own coal, and with the tariff off will absolutely drive our coal out of the New England markets. They say it is worthless stuff, but in the great case of the Boston Gas Co. versus the Westmoreland Coal Co., the greatest Pennsylvania company, it was shown that the Nova Scotia coal was worth \$3.30 as against \$4.00 for American coal, and this after the most absolute and careful test. The Nova Scotia coal is right under the sea; our coal is 400 miles haul. I, for one, would prefer to see the owners of West Virginia lands receive their royalties and pay their taxes to West Virginia, than to assist and aid New England speculators and coal miners in paying their royalty to Her Majesty the Queen, for every acre of coal land in Nova Scotia is owned by the Queen and to her the royalties are paid.

"I have never yet, since this discussion began, seen one man largely interested in the State who believes that it is the right thing to do, but I will willingly bide my time.

"If the spirit of democracy is for free trade, then treat all alike; place on the free list the woolens, the cutlery, the thousands of articles manufactured in New England for which we have had to pay double all these years. If, on the other hand, the party must formulate a revenue tariff, then bring highly-protected New England down to a revenue basis. When that is done, then in all fairness you can touch coal.

"I am for the whole Union, but my patriotism does not tell me to hand over the South bound hand and foot to the chariot wheels of the Eastern manufacturers.

"Some people seem to think that the South should prove her loyalty to democracy by sacrificing her industrial life. I reply that the South does not need to make proof of her democracy. She proved her faith through many hopeless years of humiliation amid the wails of widows in their sorrow and the cries of orphans in their hunger. Her faith burned bright and clear under the unconstitutional wreck of State sovereignties, amid the horrid saturnalia of negro domination and through the hideous corruption and debauchery of carpetbagism.

"When under the hypocritical cant of party fealty and sentiment the East induces the South to give up her budding industrial life, she will but continue her policy of exacting her tale of brick after she has taken away the straw.

"The East will have again achieved another great but selfish victory.

"I believe firmly that when the South begins to feel the sinister influence of one-sided legislation she will grimly demand to know who is responsible for the deep damnation of her taking off."

## Ex-Senator Davis Reviews the Whole History of the Tariff on Coal.

WEST VIRGINIA CENTRAL RAILROAD, }  
BALTIMORE, MD., January 2. }

### Editor Manufacturers' Record:

Anthracite coal has been on the free list for many years, and is the only coal in domestic use in New England, New York and New Jersey, which section would furnish a market for foreign coals.

Bituminous coal in the East is used almost exclusively by gas, electric, railway, steamship and steamboat companies and by manufacturing establishments.

The duty on bituminous coal is seventy-five cents per ton, which is less than half the average per cent. paid on dutiable articles under the present tariff.

No tariff act, from the organization of the government down to this Congress, has put coal on the free list.

Between 1856 and 1866 there was a reciprocal treaty with Canada which admitted, among other articles, coal into each country free of duty; other foreign coals paid a duty.

The tariff act of 1846, known as the "Walker" or low tariff, put coal at 30 per cent. ad valorem. The duty has been as high as \$2.80 per ton.

The average duty on coal from the first tariff in 1789 to the present law has been over \$1.00 per ton. The per cent. of duty on coal previous to 1860 was generally higher than that of the average dutiable article. The average per cent. of dutiable articles under the present tariff is about 48; on coal 23. The per cent. of duty on the present and proposed tariff on nearly everything used by the miner and operator, such as wearing apparel, blankets, carpets, furniture, picks, shovels, steel and iron, is higher than the present duty on coal.

If the tariff on coal is to be reduced, there is no good reason why it should be reduced below the average reduction on all other dutiable articles.

The changes from time to time in the duty on bituminous coal is shown in the following compilation of the tariff laws, to wit:

Year.	Rate.	Duty per ton.
1789, 2	cts. per bushel, equals.....	\$ .36
1790 to 1792, 3	" " " " " " " " " " " "	.84
1792 to 1794, 4 1/2	" " " " " " " " " " " "	1.26
1794 to 1812, 5	" " " " " " " " " " " "	1.40
1812 to 1816, 10	" " " " " " " " " " " "	2.80
1816 to 1824, 5	" " " " " " " " " " " "	1.40
1824 to 1842, 6	" " " " " " " " " " " "	1.68
1842 to 1846, ..	" " " " " " " " " " " "	1.75
1846 to 1857, 30 per cent. ad val., equals.....	" " " " " " " " " " " "	.55 to .65
1857 to 1861, 24	" " " " " " " " " " " "	1.00
1861 to 1862, ..	" " " " " " " " " " " "	1.10
1862 to 1864, ..	" " " " " " " " " " " "	1.25
1864 to 1872, ..	" " " " " " " " " " " "	1.35
1872 to 1893, ..	" " " " " " " " " " " "	1.75

As a matter of fact, from 1856 to 1866 no duty was collected by the United States on coal coming from Canada, as the reciprocity treaty with that country was in operation.

The official report of the bureau of statistics, Treasury Department, places the average value of bituminous coal for 1892 at \$3.32 per ton. The duty of seventy-five cents per ton makes an ad valorem duty of 22 1/2 per cent.—not quite half the average rate on all dutiable articles.

From the beginning of the government to the present time no President, no Congress, no national platform of any political party and none of the great statesmen of the past have favored free bituminous coal. Neither the Morrison or the Mills bill placed coal on the free list, but the ways and means committee of the present Congress propose to overturn and reverse the long line of precedents and the uniform policy of the government on this subject.

Great Britain, of all the foreign countries, is the only nation that will be benefited by free coal. Canada exacts a duty of sixty cents a short ton, or about sixty-seven cents a long ton, on United States coal. Why should her coal come into the United States free? The removal of our duty will not increase a particle our trade with Canada.

The United States and Canada cover large areas of territory which are contiguous and separated for thousands of miles only by a land-line or waterways. The



proximity in some instances of our mines to Canada, particularly to the Province of Ontario, enables us, by a short haul, to reach their markets and send some of our coal into Canada, paying a duty of sixty-seven cents, long ton; and from like circumstances some of their coal comes to the United States, paying seventy-five cents per ton. Remove our duty and let theirs remain and we will be at a great disadvantage. Pennsylvania, Maryland, Virginia, West Virginia and Alabama will lose much of their seaboard trade and gain nothing.

Mr. E. Gilpin, Jr., inspector of Nova Scotia mines, reports in 1890:

"The two principal shipping ports are Pictou and Sydney. They are about the same distance from Boston, namely, 625 miles. The mines are all located in the immediate vicinity of harbors. The distance from the mines to the loading grounds for vessels is from one-half to fifteen miles. Although the facilities for the shipment of coal from these ports are very imperfect, there would be no difficulty in quickly making them ample for all the coal that would be raised from the mines.

"Although the Spring Hill colliery produces more coal than any other colliery in Nova Scotia, it has had no outlet by sea until recently. Such an outlet was talked of more than forty years ago. Railroad outlets on the Bay of Fundy, at Parrsboro, thirty-three miles from the mines, and at Pugwash, on the Gulf of St. Lawrence, have recently been completed. The coal from this mine has heretofore found its market in Nova Scotia, New Brunswick and the upper provinces. It is believed that there are no mining districts in the world so accessible to and within such easy reaching distance of navigable tidewaters as are the coal mines of Nova Scotia, and especially those of Cape Breton. There are safe harbors in abundance, and there would be no difficulty in providing shipping facilities to any required extent."

The following comparative statement shows the difference in the cost at Boston of United States and Canadian coals:

ANALYSIS COST BITUMINOUS COAL AT BOSTON.

	U. S.	N. S.
Royalty, mining and loading railroad cars at mines.....	\$1 00	\$1 00
United States—average railway transportation from mines to seaboard, 350 miles at four mills per mile. ....	1 40	
Nova Scotia—average railway transportation from mines to seaboard, twenty-three miles.....		25
Water freight to Boston, average.....	90	1 00
Present duty.....		75
Cost at Boston, including duty.....	\$3 30	\$3 00
If coal is made free, deduct duty.....		75
Cost of Nova Scotia coal at Boston, duty off.....		\$2 25

N. B.—Boston is selected simply as a common point in New England, and as a large receiving port for coal.

The above shows that Nova Scotia coal can be sold at Boston with present duty at \$3.00, which is thirty cents less than the cost of United States coal. But the difference in quality is in favor of the United States. If it is conceded that United States coal is 20 per cent. better, add this to \$2.25, the cost of Nova Scotia coal, and we have \$2.70 as the value of Nova Scotia coal without the duty, as compared with \$3.30, the cost of United States coal, or an advantage of sixty cents to the Nova Scotia coal. The net profit to the producer on United States coal is between ten and twenty cents a ton. Under the present tariff the land-owners, miners, the operators, railways, American vessels and seamen are striving to retain the home market. Take away the seventy-five cents duty and they must lose much of their seaboard trade.

Of the soft coal consumed in New England it is estimated that about one-third of it is used in manufacturing, the greater portion being required by railroads, gas companies, electric railways, steam vessels,

light plants, etc. Many of the factories are located on rivers. The removal of the duty, therefore, would benefit manufacturing interests but little, and in so small a proportion upon manufactured goods as to have little effect on the cost of production.

A large manufacturer in New England, using 30,000 tons of coal annually, writing on this subject says: "Massachusetts's census shows that the cost of the fuel employed in manufacturing is equal to 2 per centum of the total cost of all material used in the woolen manufacture, to 1.7 per centum of the total cost in the worsted manufacture, to 3.2 per centum of the total cost in cotton manufacture, to 1½ per centum of the total cost in all industries."

From the above it will be seen that the cost for fuel employed in manufacturing is 1½ per cent. of the total cost on all manufacturing industries. If the manufacturer saves the entire duty of seventy-five cents per ton, it would be less than one-fourth of 1½ per cent., equal to about four-tenths of 1 per cent.

Canada, not including Nova Scotia, uses about 3,500,000 tons of bituminous coal annually, about two-fifths of which comes from the United States, on which we pay her a duty of over \$800,000. The coal regions of the United States affected by the removal of the duty produce many times the amount consumed by Canada. In 1864-65-66, the three last years of reciprocity treaty with Canada, Nova Scotia sent to the United States about 1,188,000 tons of coal, or nearly 400,000 tons annually, which at that time was about one-fifth of the bituminous coal used on or near the Atlantic coast. If, by making coal free, they would be able to send the same proportion, their trade with this country would be about 1,500,000 tons annually, and to this extent would take work and money from our people. Would this be right, and would they not ask who is responsible, and remember, when voting again, the men and party who reduced their wages and gave part of their work to foreigners?

The tariff bill, as reported, is especially damaging to the interests of West Virginia, whose leading articles of commerce are coal, ore, lumber, salt and wool, all of which it is proposed to put on the free list. Two-thirds of the State is underlaid with coal, and its production constitutes her largest industry. Free coal would not benefit a single person or industry in the State. There are fully 10,000 employees engaged in the production and transportation of coal in the State of West Virginia, all of whom would be affected by placing coal on the free list, some being thrown out of work entirely, while the wages of the others would be reduced.

Foreign coal mines on both sides of the Atlantic are near the sea. In some of the Nova Scotia mines the coal is taken from under the sea. Our coal mines are inland and from 250 to 400 miles from the ocean—to our great disadvantage. When coal mined in the United States reaches the seaboard or the point of consumption in New England, New York or New Jersey from 90 to 95 per cent. of its value represents labor.

It is generally believed that a number of gentlemen of Boston and New York, of great prominence in political and financial circles, have recently formed a company, expecting to reap large gains by free-coal legislation, and it is said that their influence is being used in favor of the proposed removal of the duty.

It is well known that foreign ships and seamen are paid less than those of the United States. If we are to successfully compete under the new conditions proposed our labor must be reduced, and we ought to have free ships. Under our present laws American coals must be carried between points in the United States in American vessels.

The census of 1890 gives about 75,000

people in the States of Pennsylvania, Maryland, Virginia, West Virginia and Alabama employed in the production of bituminous coal, principally marketed in the East, where foreign coal competes. If the average is five persons to a family, we have 375,000 people in the five States depending upon this industry for a living.

Free coal is different from all other articles named in this regard; only a few interests on the seacoast are benefited, and many thousands of persons elsewhere are injured.

The duty paid to the United States on coal for the last two fiscal years (1892 and 1893) was between \$800,000 and \$1,000,000. The democrats announce themselves for "tariff for revenue;" then why not make coal a part of it? Coal should not be classed as raw material. In the mines it has very little value, from five cents to twenty cents a ton, depending upon its quality and locality. At Boston, which is a central point in New England for the delivery of coal from the two Virginias, Maryland and Pennsylvania, it is worth \$3.30 per ton, which shows fully 95 per cent. of its value when it reaches the consumer is the labor of production and transportation. It is entirely consumed in using, while other articles, called by some as raw material, upon arriving at the factory are often in the first stage of manufacture; one is destroyed while the other is being put into a permanent form of usefulness.

It requires about \$500,000,000 annually to pay the expenses of the government, the greater part of which must be obtained from customs dues. The present duty on coal brings a revenue of about \$1,000,000 a year, which is much needed by the government. Why should Canada get the benefit of free coal when she charges us sixty-seven cents a (long) ton upon the coal we send to her from the United States?

There is no demand from our people for free coal, and no person corporation or interest has asked for it.

The following statistics of the area and production of coal in the several States will be found interesting in this connection:

States, Bituminous.	Area in square miles.	Production 1892. Tons.
Alabama.....	8,600	5,250,000
Arkansas.....	17,000	450,000
California.....		90,000
Colorado.....		3,775,000
Dakota (North and South).....		150,000
Georgia.....	200	250,000
Illinois.....	36,800	14,000,000
Indiana.....	6,450	3,250,000
Indian Territory.....		1,000,000
Iowa.....	18,000	3,750,000
Kansas.....	17,000	2,800,000
Kentucky.....	13,000	3,000,000
Maryland.....	550	3,058,350
Michigan.....	6,700	100,000
Missouri.....	26,887	3,250,000
Montana.....		600,000
New Mexico.....		800,000
Ohio.....	19,000	13,500,000
Oregon.....		60,000
Pennsylvania.....	9,000	37,500,000
Tennessee.....	5,100	2,500,000
Texas.....	4,500	100,000
Utah.....		370,000
Virginia.....	180	3,500,000
Washington.....		1,200,000
West Virginia.....	16,000	6,500,000
Wyoming.....		2,000,000
Total.....		113,103,350
Anthracite.		
Pennsylvania.....	470	41,893,316

HENRY G. DAVIS.

A MEMORIAL is to be presented to Congress asking for an appropriation of \$4,000,000 for the improvement of the harbor of the city of New Orleans. The memorial is signed by representatives of the city government, Board of Trade, Cotton Exchange, Sugar Exchange, Merchants, Dealers and Lumbermen's Exchange, New Orleans Maritime Association, Orleans Levee Board, Stock Exchange and the various railroads. The mayor has requested each of the commercial bodies in the city to appoint delegates to meet on January 15. At this meeting a committee of five will be appointed to convey the memorial to Washington.

### Mr. Grasty's Pointed Paragraphs.

WASHINGTON BUREAU,  
MANUFACTURERS' RECORD,  
ROOM "E," RIPLEY BUILDING,  
January 2.

Pat Donan laments that Southern statesmen are not what Southern statesmen once were. He forgets that it takes *occasion* to develop statesmanship just as it takes war to bring to the front great military genius. The occasion is at hand to try the mettle of those whom the South has sent to Washington to protect Southern interests, and, by protecting Southern interests, to promote the prosperity of the whole country. The wiser heads among many New Englanders even are well aware that Southern prostration would cost their section dollars to the cents that may be gained by the free-coal feature of the Wilson bill.

History shows that the first bold acts or utterances of really great men have ever called forth floods of criticism. There is in West Virginia today a young man whose career is singularly interesting, who holds the office of governor of that great State. He is probably the youngest man who has ever made governor of any Southern State. Full of courage, full of devotion to the interests of his own people, he has recently taken a position which has been widely assailed by those who were so prejudiced in favor of the ways and means committee as to regard its premature conclusions as infallible. The facts set forth in the interview published in this week's MANUFACTURERS' RECORD with Governor MacCorkle are so clear and so convincing that those who three months ago censured him on hearing only a garbled report of his views in respect to this Wilson bill will, upon reading carefully what he now has to say, cease to criticize and become converted to his way of thinking—that is to say, all whose minds are open to conviction, all who are honestly seeking after truth.

It is not the man who is forever trimming his sails to suit the fickle winds of political caprice who ultimately becomes a leader. It is not the man who lets others do his thinking who becomes a statesman. Courage is as much an element of statesmanship as clear-headedness. Read what Governor MacCorkle has to say and you will see, if you can see at all, that he has the truth on his side.

A great many people imagine because certain Southern representatives and senators are not opposing the Wilson bill before it comes up for consideration that they may, therefore, to a man, be counted upon to support it. I should hate very much to buy stock in the Whitney coal syndicate if its value depended entirely upon such unwarranted presumptions. Once upon a time a prophet complained to Jehovah that all Israel had bowed down to the image of Baal, and was dumbfounded when informed by the Almighty that He had "reserved unto himself seven thousand men who had not bowed the knee to the image of Baal." The Southern senators are not all bowing the knee to Baal, nor will they prove recreant to their duty to their own people. There are Southern statesmen in the highest sense of the word today in the United States Senate. In the coming struggle there is more than one man who will make for himself such a place in the hearts of our people that his name will be honored from generation to generation.

If the Wilson bill in its present shape should happen to become a law every furnace in Virginia would either have to sell pig iron at \$7.80 f. o. b., or go out of blast. A prominent stockholder of the Lowmoor furnace figured it out to me today thus: "British pig iron can be put aboard ship at \$8.00 per ton; add \$1.50 for the duty under the Wilson bill and \$1.00 for the maximum ocean freight, and we have the cost, along-

side Boston or New York, \$10.80. The freight on pig iron from Lowmoor furnace is at least \$3.00 per ton to Northern and Eastern markets. Subtract this from the selling price of British pig (under the Wilson bill) and \$7.80 is what is left. No furnace in Virginia can produce a ton of iron for anything like \$7.80."

"It is very strange," remarked a clergyman, "that whiskey and beer are to be exempted from additional taxation, while shareholders in companies engaged in the publication of religious books and papers are not exempted. The Christian people of the country will rise up with one accord and rebuke that kind of discrimination."

There is a very bright editor down in Virginia who recently wrote a string of glittering generalities about "An Untaxed Hearthstone," the effect of which was to make the unthinking believe that free coal would give to consumers cheaper coal. It is all well enough to amuse one's-self, but such editors as the one I have in mind ought to read again the story in the spelling-book about the boys who just for fun tied the grass across the path, and thus tripped up the poor old man and broke his back. Editor Tinsley, of Staunton, you are the man I am talking to.

The Norfolk Virginian, usually very careful in its utterances, makes a very serious slip in a recent editorial. Listen: "Democrats must understand that the defeat of the Wilson tariff bill means the defeat of the democratic party." I am persuaded that what the Virginian meant to say was that failure to reform the tariff meant defeat to the democratic party. What the Virginian might truly have said was that to pass the Wilson bill in its present form would mean the death and burial of the democratic party.

THOMAS P. GRANT.

#### The Tariff and the South.

The old South was necessarily agricultural. The new South is the development of all resources, agricultural, mineral and industrial. It is the beginning of a new era of prosperity and happiness. Her raw materials, of such immense diversity and value, were beginning to be manufactured into finished products ready for the consumption of the world; her cotton spun and woven; her coal and ores turned into iron and steel; her lumber ready for the builder. There was but yesterday a bright future ahead. And today, lo and behold, come her so-called friends and say, we have annexed the Nova Scotia coal mines and must find a market for our new acquisition. We are working for a principle; it is democratic, and we must let coal, iron ore, lumber, etc., come in free. It is democratic, and you should and must not object, although it hurts you and may even ruin your future prospects, but it's the principle we serve.

Will the new South submit to be relegated back to simple agricultural pursuits; to have destroyed her future; to allow her resources to remain idle, slumbering where they have just been brought to life? Will her representatives in Congress fold their arms in peace, saying, the South is ready to be sacrificed to the Gods that be? Smite her. Wake up, people of the South. Speak and defend yourselves. You are brave and chivalrous. Be not trodden under foot, but stand up for your rights like men.

#### Want Protection.

A dispatch from Pulaski, Va., says: "We had a remarkable gathering in our opera-house on Saturday. Leading democrats of Wythe and Pulaski met with leading republicans (white and colored) and solemnly protested against the non-protecting features of the Wilson bill, so far as coal, iron ore and pig iron are concerned."

#### The Views of a Cotton-Mill Architect.

[FOR MANUFACTURERS' RECORD.]

My attention has been called to various articles published on mill construction, and the cost of a cotton mill built in the South as compared with one erected in New England, and which have been sent through the South by persons knowing less or more of the subject they were writing about, and that your readers may not be misled, I beg your indulgence for a few words on the same subject. They do not say similar mills, but class them, through ignorance or intention to mislead, all under the general term, cotton mills.

Now, there are cotton mills—and cotton mills, and there is as much difference in them as there is in cotton—and cotton. In other words (and no phrase, when thoroughly analyzed, will so well express the difference), the difference is as much as that which exists between one and three-eighths staple Sea Island cotton, fair, and three-quarters staple low middling.

It is absurd to compare on the basis of price per spindle, without giving the class of goods made in each, the cost of the average mill built in New England in the last ten years with the average mill built in the South during the same period, and say that the Southern mill cost more than the New England mill. Any mill in either section of equal productive capacity can be erected and equipped today cheaper than it would have been or was five or ten years ago, but this is due largely to the improved methods adopted in the various departments of manufacturing and affects the cost of equipment chiefly, and does not touch what may be styled erection account, only in so far as the improved methods of manufacturing admits of the same product being obtained on a trifle less floor area in a building, but a mill in either section gets this advantage.

To illustrate the absurdity of the question as to "why the Southern mill costs more per spindle than the New England mill," let us assume a case and take an equal number of spindles for both sections, say 40,000, the Southern mill making the grade of goods most common to it during the last ten years, viz, brown sheetings, 48x48, and from No. 13 warp and No. 15 filling, weighing a trifle less than three yards to one pound, and the New England mill making print cloths, 64x64, and from No. 28 warp and No. 36 filling, and weighing about seven yards to one pound. We assume that both mills run sixty hours per week. The Southern mill will produce about 25,000 pounds per day and the New England mill will produce 8000 pounds per day. Now let us see what this means in the cost of one item alone, which is a necessity in the equipment of both mills, and see how it increases the cost of the Southern mill over the New England mill, and which will always be so until the Southern manufacturer could find it more profitable to make the same class of goods and be satisfied with a product somewhat approaching his neighbor's mill in New England of 8000 pounds per day. We will assume that they both equip their card-room with the style of card commonly known as the revolving flat card. Now, the product per card in the New England mill, quality of stock and other things of minor significance considered, would be 130 pounds per day, and, the same things considered, the product from the same card would in the Southern mill be 160 pounds per day; and yet the Southern mill would require 156 cards, as against sixty-two for the New England mill, ninety-four more in one than in the other, which at the regular market price today, viz, \$750 each, makes a difference of \$70,500 against the Southern mill in comparing the two by cost per spindle for this one item alone. Now, the construction account of the Southern mill must also be increased to provide floor

space for 156 cards, as against the sixty-two in the New England mill, and sufficient power supplied additional to operate them.

This one illustration will show plainly and conclusively the absurdity of drawing comparisons as to the cost of mills per spindle in the two sections without taking carefully under consideration all things entering into their make-up—things which every millman or practical mill architect is familiar with—so it is not necessary for me to prolong the illustration and mention the saving in power, shafting, pulleys, belting, etc., whether you put in 156 cards or sixty-two, and remember this applies to only one department alone. We are all familiar with the reply made by Rufus Choate to a contemporary who told him that the father of our country must have been quite an athlete, for it was said that he could stand on the bank of the Potomac, near Washington, and throw a silver dollar and it would strike the other side. "Yes, possibly so," said Mr. Choate, after reflection, "for a silver dollar went further in those days." However pertinent Mr. Choate's reply would be today, the point I submit for consideration is that a dollar will go as far towards erecting and equipping a mill for manufacturing a given class of goods in the hands of a Southern millman as in any other, for the class of men engaged in this business in the South are, like their brothers in New England, the brightest and keenest minds engaged in the management of any industry in this country, all of which I know by personal contact with them.

In my connection with textile mills in both sections my attention has been forcibly called to the advantage the millman has in New England over his Southern neighbor, in being able to employ experienced mill-builders who have a sufficient force of competent men under them and who are supplied with all the paraphernalia for quick and economical building, and who can put up the buildings for a mill of the capacity before referred to, from foundation to finished roof, inside of ninety days, whereas we have known similar structures in the South to be from twelve to twenty-four months in building. The Southern mill-owner is badly handicapped in this respect, and it is patent to all that it is a source of more or less expense. The full consideration of this fact, that one who is properly equipped can or ought to do better work, led Messrs. Lockwood & Green to employ W. A. Chapman & Co., of Providence, R. I., men of wide experience in the building of mills, to erect the new mill now being built in Columbia, S. C., and we think the results produced will demonstrate that it was a wise thing to do. How much the difference in the cost of building material to the Southern builder will offset the better methods and equipment possessed by his competitor in New England we leave for your readers to decide for themselves, simply saying that the cost of brick laid in the wall to the mill situated in the Piedmont section is less by at least \$3.00 per thousand and the lumber about \$8.00 per thousand than to the New England mill; but, on the other hand, the New England mill does not pay the excessive freight charges which become such an important item in the cost of the erection of a mill South.

I also still hear, but not so much as formerly, the statement: "The Southern mill must make the coarse goods and the New England the fine goods because of its climatic conditions, etc." The statement in the main is true, but the reason given is not, and such ideas exist today in the mind of the theorist only, for there is not a yard of goods woven nor a hank of yarn spun in our New England mills but that can be equally well done in the Southern mill properly equipped, and by properly equipped we mean to include skilled labor

as well as proper machinery. The chief reason why the Southern mill has made the coarse class of goods, and I believe will continue to make them, is because they are more profitable to a mill situated as it is in the cotton belt, and while it is true that these mills have been gradually obliged to raise the standard and make a somewhat finer grade of goods than obtained say ten years ago, because of a demand for such, the New England mill has been obliged to raise its standard correspondingly, and the fact still remains that the Southern mill makes the bulk of coarse goods, and, as stated, I believe this will continue so while the cotton is raised in the South and freighted to New England.

During a conversation a short time since with one of South Carolina's successful manufacturers, and she has not a few, I asked the question as to what class of goods he would advise starting up a new mill on erected in the cotton belt, and he replied: "The coarsest goods that would command a good price." I believe he knew what he was talking about. C. R. MAKEPEACE.

Providence, R. I.

#### Progress of Austin's Great Dam and Water Works.

AUSTIN, TEXAS, December 20.

Editor Manufacturers' Record:

The city of Austin is now engaged in constructing, under the direction and supervision of the board of public works, a complete system of water works and electric lighting, also electric-power plant, at a cost when finished of \$1,400,000.

The system is an entirely new plant, and is not connected with any other, but when completed will be owned and operated by the city of Austin for the benefit of the city.

The works will be operated by water-power, to obtain which the city has built an enormous granite dam across the Colorado river here, 1200 feet long and sixty feet high above low-water mark, at a cost of \$611,000.

The dam has been finished and work is now being done in building the headgate masonries.

Contracts have been made for forty-two miles of cast-iron water pipe, ranging in size from twenty-four to six inches in diameter, none less than six-inch, and 230 fire hydrants; also for light dynamos with a capacity of 18,000 sixteen candle-power incandescent lamps, and generators with a capacity of 500 electric horse-power. The city has also bought two pairs of 4,000,000-gallon pumps, making a daily pumping capacity of 8,000,000 gallons.

The turbines bought are the "Victor," and the power to be used at first will be 2500 horse-power, but the power house is so arranged that additional wheels can be put in position at any time and increased capacity thus secured for the city's plant. A settling reservoir of not less than 50,000,000 gallons capacity will be constructed.

In addition to any power that will be required by the city at any time for its own works, there will be a surplus of water-power, amounting to several thousand horse-powers, that can be leased for manufacturing purposes.

This great work is being built by the city, the taxpaying citizens having voted, with a majority of twenty-seven to one, for the issuance of bonds to the amount of \$1,400,000 for that purpose, taxing themselves to pay the interest and providing for a sinking fund on said bonds, besides pledging the entire revenues of the system when completed to the payment of the bonds. The rates that will be adopted by the city will be very low, and it is confidently expected that the receipts will not only pay the interest and sinking fund on the bonds and all operating expenses, but will also pay a balance into the city treasury.

W. J. OLIPHANT,

Secretary Board of Public Works.



## Atlanta Inaugurates a Great Exposition.

[Special Cor. MANUFACTURERS' RECORD.]

ATLANTA, January 1.

Atlanta, Ga., has determined to have a great exposition. The suggestion was made and the endorsement was quick and emphatic. Mr. S. F. Woodson, president of the Chamber of Commerce, with ex-Governor R. B. Bullock, president of the Commercial Club, and the Constitution and Journal, called a meeting on the 28th, and over 300 of the business leaders of the city met, and after full conference voted unanimously to have a fair on a colossal scale.

There has never been a stronger gathering of Atlanta's solid citizenship. Mr. Sam Inman, the leading cotton dealer of America, was made chairman and Mr. H. G. Sanders, secretary. The talking was virile and straight to the point. It was one-sided, too. The spirit for the exposition was unqualified and resolute. Mr. Inman did not wish to be chairman, though he favored the fair, and called on Mr. Clark Howell, of the Constitution, who made an admirable statement of the objects of the call. Atlanta had felt her hard times like the rest of the land, and an exposition would help it. And it must be big and help the whole South.

Mr. Henry Richardson, editor of the Journal, followed. There had been a campaign of expositions, and Atlanta, that had put out that huge one in 1881, could and would go a far better one now. Next year would show revived business, and Atlanta can succeed and her men will do their duty. Captain J. G. Oglesby, first president of the Commercial Club, while he thought that a local fair would not help, was in favor of a great affair, such as was proposed, and he was for undertaking a big one. Judge H. Palmer claimed that Atlanta was the best town in the world, and Atlanta folks never wanted to move away. A Nashville man told the truth when he said that the Atlanta spirit was to pull for Atlanta. We must get up a broad exposition. Atlanta was the gateway of the South, and the trade of South America, the West Indies, Mexico and Central America should come through the South and Atlanta. Ex-Governor R. B. Bullock endorsed the project, and called on Colonel E. B. Stahlman, the head of the Southern Railway & Steamship Association, who said that this gathering exemplified Atlanta's public spirit. It was said that Atlanta owed much to the railroads, but the railroads could not build up a place unless its people worked together. The railroads, he said, would help this movement, and he would be glad to aid it. He further added that if he ever changed his residence he should come to Atlanta. General Clement A. Evans said his whole soul was in this movement, and had been. He was glad the young men were in it. Atlanta was cosmopolitan, and should make a splendid showing of Southern greatness; that the South would rally to it, and he thought the whole country would. Atlanta and Georgia owed this enterprise to the country. Hard times had been here, but better were coming, and we must forecast for the bright future and plan on big lines, not afraid of failure, with predestined success a certainty. He pledged himself to the movement.

Mr. C. A. Collier made a good talk. The country, he said, was all right. The time was opportune. He knew the Atlanta people, and the men were present who have made Atlanta and who would and could make this exposition a success. He was willing to give his money and work to any enterprise of this kind. Capt. R. J. Lowry, president of a strong bank, favored the enterprise, and, while the times were hard, Atlanta showed a steady growth, and that all that was needed was confidence. Mr. Inman followed with some references to

the old exposition of 1881, started under gloomy circumstances compared with the present, but which was a fine success, adding \$5,000,000 to the wealth of Atlanta and being the forerunner of the great enterprises that followed. We must have a grand affair, and he thought that its opening should be twenty months off. W. C. Glenn, a bright young lawyer, said the younger men would come to time. The United States and England were in a great contest for the world's commerce. The South and East were in a trade conflict, and the country's big industries must sooner or later come South. Georgia and Atlanta afforded the finest field. Atlanta should go forward, and these expositions were weapons of advancement.

Mr. W. A. Hemphill, the business manager of the Atlanta Constitution, offered the following resolution, which was carried by a unanimous and rising vote:

*Resolved*, That it is the sense of this meeting that we have an exposition, and that the chairman appoint at his leisure a committee of twenty-five, of which he shall be a member, to devise and announce, without delay, the plan of the same; to consider the ways and means for pushing the enterprise to a successful conclusion, and to take such steps as will be necessary for permanent organization.

Later in the afternoon Mr. Inman announced the committee, as follows: Jos. Kingsberry, R. D. Spalding, Chas. A. Collier, R. B. Bullock, S. F. Woodson, Clark Howell, H. E. W. Palmer, J. G. Oglesby, E. B. Stahlman, W. A. Hemphill, H. H. Cabaniss, Anton Kontz, R. J. Lowry, J. W. English, E. P. Chamberlin, M. F. Amorous, Joseph Hirsch, W. D. Grant, J. R. Wylie, E. C. Peters, C. E. Harmon, John A. Fitten, Forrest Adair, Phil H. Haralson, Jacob Elsas, S. M. Inman.

Thus this large project is started, and a result will be created that will not only attract the interest and attention of America, but of the South, with its imperial endowment of resources.

Atlanta is on her mettle. Her resolute and invincible spirits of progress are fully committed to a great achievement, commensurate with the ambition of any community, and her people will solidly back this attempt to outstrip all former efforts at material conquest and the enlargement of her municipal repute. I. W. AVERY.

### The Time to Build.

There have been few periods when buildings could be erected and real estate improved so cheaply as at present. Building material is low, labor is cheap and funds can be obtained on bond and mortgage at a low rate of interest. Commenting on this fact an architectural journal says:

"These are facts that architects can present fairly to their clients, and in view of the present state of the market conscientiously advise them to enter at once on needed improvements. Many moneyed men have been holding back work for years on account of the high price of labor, the risk of strikes and the general expense of building, but the present conditions are such that they need not hesitate. The universal lack of employment forbids any serious conflict with the unions. They, both rank and file, recognize even more fully than does the capitalists the urgent necessity of accepting such employment as they can get, and little attention will be paid to union rates for a time at least. Besides, dealers in materials are hungry for business and recognize the necessity of handling goods on a small margin, thus placing in the hands of investors, almost on his own terms, the two elements that make the cost of building. Moneyed men who are looking for profits ought to see the point, and those who get in first before the reaction sets in are sure to secure the largest profits from their building operations. No better service can the architect do his client at this time than to bring these facts to his attention. Now is the time to start large

operations, so as to be ready to break ground and commence work early in the spring."

Here is a point which is worthy of consideration by the convention of Southern architects which is soon to assemble in Augusta, Ga.

### The Bessemer Ores of North Carolina.

PORTLAND, ME., December 27.

*Editor Manufacturers' Record:*

The article on investigating North Carolina Bessemer ores, published in the MANUFACTURERS' RECORD of December 22, would seem to convey the idea that but little development had, as yet, taken place on the property of the Bessemer Mining Co.; also, that future operations would depend entirely upon the showing made by the diamond drill.

To correct any such erroneous ideas, allow me to state that since April last more than \$15,000 have been expended in opening up the numerous veins of ore owned by this company, and that a large proportion of this sum was used in putting down a fine shaft at the Carr mine, some 200 feet deep, and in drifting at a level of 170 feet to the several different deposits of block and powdered ores.

At a special meeting of the stockholders of the Bessemer Mining Co., held at Bessemer City, N. C., on the 13th inst., \$18,000 was appropriated to continue the developing work and the new shaft will be continued down another fifty feet, at which depth drifting out will again take place. The ores of this mine are of the very highest grade, running from 60 to 68 per cent. metallic iron and extremely low in phosphorus and silica, making them very valuable for fix.

At the same meeting it was decided to make further developments at the Little Mountain mine, or Devil's Workshop, so named by a noted mining expert.

This mine is located about three-fourths of a mile east of the Carr mine, and its vein is traceable for more than one mile. The outcropping is largely of quartz, and some eight feet wide.

In 1891 a shaft was sunk on this vein by the old company to water level at a depth of some fifty feet. The vein at this depth shows a width of more than twenty feet, and the ore is quite free from quartz, but not as rich in iron as that of the Carr mine, it carrying only 54 per cent.

To ascertain the width of this vein and the character of the ore at a depth of some 400 feet, the diamond drill will be brought into use; hence the contract mentioned in the article referred to above.

Experts say this is the only true limonite vein of iron ore in place yet found in the Southern States. They also declare it to be their firm belief that gold will be found in this vein at a depth of less than 800 feet, basing their belief on the fact that this immense vein was once a molten mass (and no one can dispute this after having been down the shaft), and that the gold, being freed from the quartz by heat, settled below the lighter metal—iron.

If gold be there, it is quite safe for the present, and I feel warranted in saying that no member of the Bessemer Mining Co. will either lose any sleep from fear of its being carried off by burglars or lie awake nights trying to estimate the size of his individual lump.

There are many things of interest in and around the growing town called Bessemer City, such as the old stone furnace, which went out of blast in 1792, with the open-cut mining operations carried on at that time; the immense deposit of fine window-glass sand, the fine new cotton mill erected by the Bessemer City Cotton Mill Co., one of the largest in the South, its length being 476 feet, width eighty feet, 268 feet of which is two stories, but to write of these is not my purpose in this communication.

J. C. RUNDLETT.

### More Discoveries in Arkansas.

The deposits of marble, iron, coal and other valuable material which are known to exist so abundantly in Arkansas have been frequently referred to in the MANUFACTURERS' RECORD. It has been known that clays and ochre formed a part of the State's resources, but until recently their extent and value were scarcely appreciated. During the last few months a party of prospectors have been working in Bradley, Drew and other counties in southern and southeastern Arkansas, and have discovered that the clay and ochre beds of that region are of great value and apparently inexhaustible. In a letter to the MANUFACTURERS' RECORD Mr. M. H. DeMalher, who conducted the explorations, states that in Bradley county can be found all the best material for common and pressed brick, vitrified brick, tile, terra-cotta, pottery and vitrified piping. On the Drew county side of the Saline river is found all the substance suitable for vitrifying. Silicates of alumina have also been discovered. In Bradley county alone fifty-two varieties of clays have been secured by the prospectors. In the vicinity of Monticello, Ark., beds of the aluminous variety, with outcrops twenty feet in thickness, have been found. All the clay varieties named above are found in this locality, and chemical tests show, it is claimed, that they are equal in quality to any known in this country. The entire hill portion of the Monticello district has been found to be underlaid with clay and ochre beds. Of the latter substance the prospectors state that in a crude state it weighs eighteen pounds to the cubic foot, showing an unusually heavy body. It has the clay at its base and is superior to the usual feldspar ochre of commerce. It can be made up into a large number of shades. In fact, over forty different tints have been developed in experiments. The deposits are unusually plentiful in and about Montongo, Ark., and examinations recently completed show that they extend over a territory for a distance of six miles from the place. The ochre is divided into two classes, locally termed "Montongo" and "Rough and Ready," the latter, while more than equal in color and quality to the best Rochelle ochre, is yet excelled in color by that of "Montongo," which occurs in two shades of yellow, one bordering on orange, and the other a flaky ochre, the color of which at a short distance is indistinguishable from chrome yellow.

In Columbia county, near Magnolia, the party has made another discovery of the highest importance within a few weeks. They have found kaolin of the best qualities, suitable for manufacturing purposes, in deposits which can be worked on the most extensive scale without being exhausted. Samples of it have been taken out, as well as samples of the clays and ochres, for the examination of anyone who may wish to test them.

The party making these investigations have been sent out by the Little Rock Gazette and are in no way connected with local capitalists or land-owners. Governor Fishback is also much interested and is giving time and attention to the explorations which are still in progress.

Already the discoveries have attracted the attention of local capitalists, and Mr. J. N. Wheeler, of Warren, Ark., contemplates establishing a plant in that vicinity for making pipe and vitrified brick. The territory has several railroads, and shipments can be made to a number of markets.

MANY of the largest manufacturers in San Antonio are interested in forming an organization of manufacturers in that city for purposes of mutual benefit. Several meetings have been held and an association practically formed. V. P. Brown and George Maudry are among those interested.

## Manufacturers' Record.

PUBLISHED EVERY FRIDAY BY THE  
Manufacturers' Record Publishing Co.  
MANUFACTURERS' RECORD BUILDING,  
Lexington and North Streets,  
BALTIMORE.

RICHARD H. EDMONDS,  
Editor and General Manager.  
C. R. MARCHANT, Business Manager.

NEW ENGLAND OFFICE—503 Exchange  
Building, Boston.  
S. I. CARPENTER, Manager.

NEW YORK OFFICE—39 and 41 Cortlandt St.  
Room 90.

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BALTIMORE, JANUARY 5, 1894.

### What Advertisers Say.

CHANDLER & TAYLOR CO.  
Engines, Boilers, Saw Mills.  
INDIANAPOLIS, IND., December 23.  
*Editor Manufacturers' Record:*

We are pleased to state to you that we consider your valued paper one of the best mediums for reaching the Southern and Southeastern trade, as has been evidenced by our seven years of advertising with you. Anyone desirous of reaching the trade above mentioned should not miss a representation in your paper. With best wishes, we are, yours very truly,

CHANDLER & TAYLOR CO.,  
W. M. TAYLOR, Secy.

IN view of the vital interest of the present tariff discussion to the South, the MANUFACTURERS' RECORD has established an office in Washington in the Rapley Building, over the new National Theatre, in charge of Mr. Thos. P. Grasty. The MANUFACTURERS' RECORD extends a hearty invitation to all Southern business men, especially those interested in industrial matters, to make its Washington office their headquarters while in that city.

THE Wilson bill is not a free-trade measure. But it is a free-raw-material measure. American industries have nothing to lose and everything to gain from free raw materials. It will not ruin, but revive them to admit wool, coal, iron ore and lumber free of duty.—Baltimore Sun.

It may be fun to the manufacturing boys of New England, but it is death to the iron-ore, coal, lumber and other frogs of the South.

THE taxing of coal has shut up hundreds of factories in New England on the one side of the continent and in California on the other. The taxing of iron ore has paralyzed the iron-working industries of every State that is not near to the iron deposits of this country.—Baltimore Sun.

The first statement is not true, but supposing both were true, must the government legislate to destroy the natural advantages of the South in order to build up New England? Must the South's productions be made free and New England's manufactured products be protected simply to prevent the South from continuing its present development? When did the Baltimore Sun turn New England's advocate against the South?

G. V. YOUNG, of Waverly, Miss., writes:

Times are hard and money still harder to get, but I can't do without the MANUFACTURERS' RECORD.

### Atlanta and Its Proposed Exposition.

Of all the marvelous places for a union of energy and for public spirit, when it comes to any great undertaking calculated to add to the greatness of the city, which this country has produced, there is none greater than Atlanta. None can study the history of Atlanta without being amazed at the power of combined effort to build up a city, for the growth of that place has been one of the wonders of the day, in that there has been no halting in the career of progress. In periods of depression following over-development, as in the great cities of the West, straight forward through bad times as well as good times the business men of Atlanta have carried forward the growth of that city.

Last week it was suggested that Atlanta ought to have a great exposition, not on such a scale as the Chicago World's Fair, of course, but something far ahead of what the South has ever had. The suggestion met a ready response. A public meeting was promptly called. Three hundred leading business men were on hand and promptly decided that such an exposition should be held. A committee of twenty-five was appointed, with Mr. S. M. Inman, the head of probably the largest cotton house in the world, as chairman, to outline a plan. The next day the committee met, and men got up out of sick beds to attend it purely out of public spirit. No time was wasted. It was voted that Atlanta should have an international exposition in 1895, giving special attention to the South and to Central and South American exhibits; that a company should be incorporated with a minimum capital of \$1,000,000, with the privilege of increasing to \$5,000,000; that the charter be drawn up immediately; that a preliminary fund of \$200,000 was needed, and this the committee practically pledged before it adjourned—such is the record of one week's work. All honor to Atlanta, the typical city of the progressive South. It has undertaken a great scheme which it will carry to success, and which will prove of inestimable value to this section. The South has needed just such a grand exposition, where it can display as it has never displayed the amazing richness of its mineral and timber resources; where it can show the vast agricultural capabilities; where it can present to hundreds of thousands of visitors a concentration of all its advantages and resources for their investigation. Grand in conception, the MANUFACTURERS' RECORD predicts that it will be grander in execution, and that its value to the South will be beyond the possibility of estimating.

### An Honest Confession, or Rather Two.

The Lehigh valley manufacturers know very well that free raw material is their salvation, and they are candid enough to say so.

It is not necessary to talk about cheap labor in the South, because it is simply impossible to legislate for one portion of the country against the other.—Philadelphia Times.

Here are two confessions—first, that the Lehigh valley iron manufacturers, because of Southern competition, must have free raw materials, and next, the heartless indifference with which the South's struggling industries are to be sacrificed to save Pennsylvania. Legis-

lation is needed to save Pennsylvania's furnaces, and they must have it, but when it comes to the South the question of justness is promptly dismissed, because "it is impossible to legislate for one portion of the country against the other." The Times seems to be a little off.

### Southern vs. Northern Iron Pipe-Makers.

The iron pipe-makers of the South, who have been fighting so bravely and successfully for a share of the trade of Northern cities, have had far more to contend against than is generally known. It is only natural that the Northern works should have thrown every obstacle in the way to down competition, and that they have not succeeded is a matter for congratulation.

A claim made by many of the Northern works, and always brought forward most strongly when a possible contract is in sight, is that the pipe made in the South is of inferior quality to that produced at Northern plants, because the iron used is all produced from Southern ores. Those who use such an argument usually conceal carefully the fact that probably over 80 per cent. of the mixture used in Northern foundries is Southern pig iron, and that it is used not only because of its relative cheapness, but for the universally acknowledged fact that Southern irons become more fluid when melted and consequently form a more perfect and homogeneous pipe, free from blow holes or other imperfections, and also with a smoother surface. The manager of one large pipe foundry in the North said not long ago that when he wanted to make extra fine small pipe he made it a point to use little else but Southern iron, as it could always be depended upon to give satisfactory results. This will be confirmed by any good melter.

Occasionally a rather suspicious-looking clause has been inserted in small pipe specifications for certain Northern cities, by which Southern competitors are effectually barred from bidding. This is, the requirement that all pipe shall be cast bell end down. The approved practice of the present day is exactly the reverse of this, the bell of the pipe being uppermost in the mold. The majority of works, certainly all that have been constructed in recent years, have adopted this form, but in the North the older works, having used the bell-down system in former years, still retain the molds and appliances for casting this way, even while being fully equipped to cast bell upward. This is rather convenient at times, as it enables the Northern works to bid for pipe whichever way specified, and, should they have the opportunity, it is not difficult to conceive of their trying to exert sufficient influence upon those who draw up the specifications to induce them to add this provision, which minimizes the chances of competition from the South.

Relative to the ability which Southern foundries have shown in placing their pipe in the North, some figures of freight are interesting as compared with the freight paid on iron by Northern works. The freight on one gross ton (2268 pounds) pig iron from Birmingham, Ala., to Philadelphia, by rail and water, is \$4.01. About 4 per cent. is lost in melting, consequently 2268 pounds of pig iron

will make 2175 pounds iron pipe. Therefore the freight paid on sufficient pig iron to make one net ton (2000 pounds) iron pipe would be \$3.68. As against this, iron pipe shipped from Birmingham pays a freight of \$5.25 per ton, since it must go all rail because of the expense of rehandling and possibility of breakage if sent by rail and water. This places a Philadelphia pipe foundry in a position of having \$1.56 less expense in this direction alone, while there are other advantages also in favor of the Northern concern. This being the case, we are inclined to think that the recent announcement of the closing down of a large Philadelphia pipe foundry because of inability to compete with Southern foundries was either due to the necessity of making the usual annual repairs, or to effect legislation, or to arouse the sympathy of Northern pipe buyers.

### An Amendment to the Wilson Bill.

THE MANUFACTURERS' RECORD believes that the Wilson bill could be made very much simpler and more easily understood without materially altering its provisions, and so we offer the following substitute:

Whereas, The Northern States have had the benefit of a protective tariff for many years, under which they have developed enormous industrial interests, levying a heavy tribute on all other sections for their manufactured products;

*Resolved*, That it is inexpedient to change this system, and the protective tariff must be retained on everything made north of Mason and Dixon's line; and,

Whereas, The South is just beginning to develop its industrial interests and is now a large producer of coal, iron ore, lumber, pyrites, etc., which is contrary to the purely agricultural system that has prevailed in that section, and which, if allowed to continue, will make the South even richer than New England;

*Resolved*, That free trade prevail on everything produced south of Mason and Dixon's line, because this will add to and strengthen the industrial supremacy of New England at the expense of the South. And does not the Bible say that "to him that hath shall be given, and from him that hath not shall be taken, even that which he hath."

This would cover the whole matter without any important changes from the general plan of the bill and greatly simplify it by omitting unnecessary verbiage. The interpretation of the scriptural quotation is said to be that he that hath much righteousness and seeks for more shall have it, while he who has but little takes so small an interest in increasing his stock that even what he has shall be taken away. Is this going to apply to New England and the South?

### A Wall-Street View of It.

The ironmakers of the South are introducing iron cheaper than those of Ohio and Pennsylvania. In fact, they can ship their iron to those States and undersell the ironmakers of western Pennsylvania and southern Ohio in their own markets. If foreign iron is admitted free of duty the New England factories would be greatly benefited thereby.—New York Financial News.

New England has had the benefit of full protection for thirty years. Why legislate now wholly in its benefit to enable it to continue its industrial supremacy, and at the same time legislate against the South? Why not "tote fair?"

### Seeing the Tariff Point.

The Rome (Ga.) Tribune says:

By taxing coal the cotton manufacturers of New England are taxed, and the infant development of such manufactures in the South is encouraged. By placing coal on the free list New England cotton manufacturers could easily shut out competition, and immense harm would be done the great coal industries of the Virginias. Here is a double disadvantage and an aspect of the tariff business that should make Southerners think.



**Where to Advertise for Profit.**

Messrs. Walker & Elliott, extensive manufacturers of machinery, of Wilmington, Del., in a letter to the MANUFACTURERS' RECORD, say:

We have received a considerable number of inquiries in regard to our machinery, some of them as far away as the Sandwich Islands and England, but we are very rarely able to trace the source of them. As we do most of our advertising in your paper, we have been giving it the credit and think we are not far wrong. It is also our opinion that anyone who wishes to reach Southern trade can find no better medium than your paper. We feel sure it has helped us and would not seriously think of withdrawing our advertisement.

In a subsequent letter Messrs. Walker & Elliott say that "the inquiry from the Sandwich Island was from the Koloa Sugar Co." Looking up the subscription list of the MANUFACTURERS' RECORD we find:

Koloa Sugar Co.,  
Koloa Kanai,  
Hawaiian Islands.

It pays to advertise in the MANUFACTURERS' RECORD, but it is true in this case, as in all others, that advertisers cannot always trace the direct results, just as Messrs. Walker & Elliott could not in this case.

**Pushing Southern Goods in Foreign Markets.**

A few months ago the MANUFACTURERS' RECORD noted the establishment in San Antonio, Texas, of a commercial house composed of North Carolinians familiar with the cotton-goods trade, in order to push the sale of Southern cotton goods in Mexico. Heretofore the business has been done via New York and St. Louis, but now it is proposed to ship direct to Mexico via San Antonio. It was not long ago that we also reported that Augusta, Ga., cotton manufacturers were making goods for Manchester, England, to which point they were shipped unbranded. At Manchester they are branded with English marks and exported, the Manchester people finding this more profitable than to buy the goods in their own market. Three weeks ago we told of large shipments of agricultural implements that are being made by a Virginia house to China and other foreign countries. Now the report comes that Mr. John Eustis, a brother of the United States ambassador to France, is arranging to establish an agency in Paris for several Augusta cotton mills, with a view to pushing their product throughout Europe.

IN 1891, before there was a whisper about the solvency of the Richmond & Danville Railroad Co., the New York Herald published an elaborate statement about its affairs, giving a list of all the lines composing the system and setting forth the earnings and expenses of each. It appeared from this statement that it was losing heavily on several of its branch roads, which had been built as feeders to the main line. The accuracy of those figures was vigorously denied from headquarters at the time, but that they were substantially accurate has since been demonstrated, and that the Richmond & Danville road is today receiving from certain of its branches less money than it is costing to operate them is a matter of public notoriety. These branch roads were undertaken with the best of motives—the railroad system not only desired to enlarge its business by feeding the main stem, but the active spirits in the system had also a genuine desire to develop sections of the South which were without railroad advantages.—Charlotte Observer.

Our usually correct contemporary is wrong. There were many whispers—even stronger things than whispers—long before 1891 about the Richmond Terminal business. Disaster was foreseen by many, not so much because of lack of business or building of branch lines as

Wall street wrecking operations. That is where this great system was ruined. Of course, some branch lines were not wise, especially at what they cost the parent company. The Richmond & Danville is a magnificent property, whose value in the future will be much greater, if kept out of Wall street wrecking, than ever in the past.

**Another Source of Southern Wealth.**

The MANUFACTURERS' RECORD has often commented upon the growth of a new industry in the South—the fattening of cattle on cottonseed meal and hulls for shipment to Northern markets. This business has assumed considerable proportions, and a dispatch from Montgomery, Ala., in reference to it says:

A new and rapidly-growing industry has of late developed here, assuming considerable proportions. A few parties from Montgomery and other points South are buying poor cattle in Texas, shipping them to Montgomery and fattening them near the Southern Cotton Oil Co. mills on cottonseed meal and hulls without any other feed. It takes generally from three to four months in the winter to fatten them, and by that time they take on, according to the size of the cattle, from 350 to 400 pounds a head, the whole cost for feed averaging only from \$5.00 to \$7.00 a head. There are now near the Southern Cotton Oil Co.'s yard 2000 head belonging to one firm and 700 to another party, all from Texas, supplied by the Southern Company, which furnishes them from sixty to seventy tons daily, besides what the Alabama Cotton Oil Co., of Montgomery, furnishes to dairies, etc., the latter's sales being about 6000 tons and the Southern's about 8000 tons of hulls annually. The cattle when fat are shipped from here to Northern and Eastern markets, where they sell readily at remunerative prices. This new industry bids fair to become very soon more general, and will prove an immense blessing to the South.

PRESIDENT GRANT is on record also for the policy of free raw materials—the policy of the Wilson bill. In 1874 he wrote to Congress and said: "Those articles which enter into our manufactures and are not produced at home, it seems to me, should be entered free. \* \* I will instance fine wools, dyes, etc." And President Grant clinched his testimony in favor of the leading feature of the Wilson bill, which is free raw materials, by declaring that "the introduction, free of duty, of such wools as we do not produce would stimulate the manufacture of goods requiring the use of those we do produce, and, therefore, would be a benefit to home production."—Baltimore Sun.

Did the Sun willfully misrepresent the case by saying that President Grant was on record as endorsing "the policy of the Wilson bill" when he expressly said "articles which are not produced at home?" Don't we produce iron ore and coal, pyrites, etc? Is the Sun's case so weak that it must bolster it by misrepresentations? And so the Sun quotes Grant, Blaine, McKinley and President Arthur as its authorities for favoring free raw material, and yet the Sun has failed to announce its change of heart from democracy to republicanism.

No account is taken of the fact that the reduction is entirely on free raw material, and that the duty on pig iron of \$6.60 a ton remains practically the same.—Philadelphia Times.

Has the Times been napping? Surely it did not mean to willfully misstate the case. The reduction on pig iron to 22½ ad valorem would reduce the duty down to from about \$1.75 to \$2.25 a ton, according to English prices, and yet the Times says that "the \$6.60 (\$6.72) duty on pig remains practically the same."

THE American Manufacturer, of Pittsburgh, says:

Mr. Edward Atkinson's advice that the South could increase the consumption of its iron by encouraging the importation of Mr. Whitney's Nova Scotia coal reminds us of the late Governor Seymour's attempt to help enlistments during the late unpleasantness by advising people to stay at home and raise children for future armies.

**Why Chicago is Successful.**

The thousands of Southern people who went to the World's Fair thought it a wonder, thought Chicago a great city, and most of them may have thought the Chicago people above the ordinary plane of humanity. A few hundred studied out the real cause of it all. The fact is that in all the glitter and glare and splendor and interest of such an exposition we are lost in admiration of the outside, and cannot coolly analyze the forces that have produced such a marvelous conception of man's ingenuity.

A Chicago correspondent of the New York Times has been making just such an analysis. In spite of all that has been heard of Chicago in the last ten years, he argues that until the World's Fair it was known to the people across the water as one might regard a "puff of smoke in a cloudy sky"—to be thought of for the instant. But the European visitors to this country in 1893 will never forget the miniature city nor the people who created it, while to Americans Chicago has become a household word which will be perpetual.

How did the Chicago people accomplish it all? By unanimity of action. By "pulling together."

The projects which have resulted successfully in Chicago have been carried out by pulling together. People haven't time for much discussion out there. If a shrewd business man or capitalist has a scheme which he thinks is good, his friends rely a good deal on his judgment and what he has done in the past. They help him, and the object is accomplished. When the gates were first opened to the White City the idea of having a "Chicago Day" was scarcely thought of. Most of the residents were for the time content with the other results of the exposition. Some one finally conceived it. Chicago thought it practical. Everyone who could go went—first, because he wanted to see the fair again; second, because he felt he was a part of Chicago and he wanted to help make it a success. On that day 716,881 people paid admissions to it. Just think of it a moment!

Every city and town in the South can imitate Chicago. We don't mean on the same scale nor anything approaching it, but by following the same principle—by pulling together. If a town of 1000 people wants a store or factory, which is the best way to get it—let twenty or thirty work for the enterprise which will benefit all and the rest do nothing, or have all work for it? This question answers itself.

The Chicago fair is a good thing to think over, especially the reasons for its success. Augusta people have thought over it, and the exposition is one of the results. Atlanta people are thinking of it, and 1895 will show the brilliant conception of this thought.

No, the Chicago people are no higher, no brighter and have no more ability than the people in any Southern city.

Pull together and see if this is not true.

THE development of the sugar interests of Louisiana under the bounty system has been wonderfully rapid, giving promise of the magnitude which this industry will reach unless crippled by unwise tariff laws. New Orleans has already received this season over 1,000,000 barrels, a gain of 243,000 barrels

over the same time last year. The Times-Democrat estimates that the full crop will be at least 1,300,000 barrels, or 600,000,000 pounds, which will be the largest yield on record. Unfortunately, this great industry is threatened with injury, if not destruction, by the Wilson bill, unless it is defeated or amended.

**Tariff Views of a Conservative Richmond Banker.**

Mr. John P. Branch, a leading Richmond banker, in an interview says:

I consider that the Wilson tariff legislation protects New England manufacturers to the detriment of the Southern States, who have been "hewers of wood and drawers of water" for the Northern States for the past century, and now we find a Southern representative willing to take from the South what little protection the coal and iron interest gave them for the benefit of the North. It is very clear he does not represent the sentiments of his constituents. If I were in his place I would resign the trust, for it is clear he could not be re-elected.

THE Wilson tariff bill has assumed the position of a party measure, and the party standing of democrats will be gaged by their action upon it. It is not believed that a sufficient number of democratic votes could be rallied to carry out such a desperate breach of discipline as this would be (to recommit the bill).—Baltimore News.

And so the people's representatives must cease to be men with some conviction as to duty. They are expected simply to be automatons, to move as moved by party machinery. If necessary, they must willfully sacrifice their country simply to follow the dictates of a few who have devised the Wilson bill.

FREE ore, free coal, free baryta, free pyrites, free wool, greatly reduced rates on pig iron and other Southern products are the prizes for which many Northern factories are quietly but vigorously working, because success means the crippling of the industrial interests of the South. Will the South help to destroy its own prosperity?

THE World's Fair souvenir edition of the Engineering Magazine, of New York, is one of the most beautiful publications that has been brought into existence by that marvelous exposition. The Engineering Magazine may well be proud of its splendid achievement in this special issue.

**A Modern City.**

Roanoke, Va., is one of the Southern cities which keeps pace with the times in the matter of public improvements. Of the total amount of over ten miles of sewers which have been laid in the city at a cost of about \$60,000, by far a larger percentage of it was laid during the year 1893 than in any previous year. Contracts have been let for about five miles more of sewerage. Within the past eighteen months over eight miles of macadamizing have been done upon the streets at a cost of about \$78,500, or \$9,800 per mile. The year 1893 has witnessed the completion of four public buildings and many improvements on other public buildings and property. The aggregate cost of these buildings amounts to \$39,969.51. During 1893 electricity was substituted for lighting the streets in place of gas. The lights are now furnished by the Roanoke Electric Light & Power Co. at an annual cost to the city of \$9,161.60.

THE young men of Charleston, S. C., are beginning to think of the advantages their city and themselves would gain by organizing a business league, and the matter is now being considered. Mr. Wilson G. Harvey, Jr., is one of the promoters of the scheme.

W. T. Gates, jeweler at Nashville, Tenn., has made an assignment to G. W.



Gates. The liabilities are estimated at \$17,000.

C. Burke and John Birch have been appointed receivers of the firm of J. W. Burke & Co., printers and publishers at Macon, Ga. Assets are \$75,000 and liabilities \$100,000.

R. L. Christian & Co., grocers, of Richmond, Va., have made an assignment to J. B. Mosby as trustee. The liabilities are estimated at \$30,000.

#### New Financial Institutions.

The Onancock (Va.) Bank has been organized with \$50,000 capital and the following-named officers: John P. L. Hopkins, president; Francis T. Boggs, vice-president; E. A. Herbst, cashier; Wm. J. Doughty, bookkeeper.

Dr. W. J. Murray, Dr. W. O. Brice, L. T. Levin, W. C. Fisher, Julius H. Walker, W. R. Muller, D. Gambrell, R. H. Edmonds, F. W. Husemann, J. P. Meehan and H. C. Patton have organized the Homestead Building and Loan Association at Columbia, S. C., with \$200,000. It is to conduct a building and loan business.

W. R. Huff and J. D. Harris, of Atlanta, are among the projectors of an insurance company to be called the Farmers' Mutual Insurance Co. of Atlanta.

Application for authority to organize the First National Bank of West Plains, Mo., has been approved by the comptroller of the currency.

Citizens of Boonsborough, Md., are considering the idea of starting a bank with \$50,000 capital.

The Columbian Building and Loan Association has been chartered at Richmond, Va., with J. B. Pace, president, and T. A. Weller, secretary.

The Trenton (Mo.) National Bank has been authorized to begin business with \$75,000 capital.

#### New Bond and Stock Issues.

New York bankers have taken \$75,000 worth of bonds of Huntington, W. Va., at par and \$8,000 accrued interest. Six months ago these bonds could not find a bidder for them.

The bond issue that Harrisonburg, Va., is authorized to make amounts to \$75,000, and is to refund the existing debt. D. M. Switzer, mayor, will inform investors.

The City National Bank of Knoxville, Tenn., will increase its capital from \$100,000 to \$200,000.

The Hamilton-Brown Shoe Co., of St. Louis, has increased its capital from \$750,000 to \$1,000,000.

#### Financial Notes.

THE firm of Wilkinson, Register & Co., of West Point, Va., will hereafter do business under the title of the West Point Banking Co.

THE Merchants Bank of Macon, Ga., has been absorbed by the banking-house of I. C. Plant's Son.

B. B. HUNTING has been appointed national bank examiner for the district embracing Virginia, West Virginia, the Carolinas and Tennessee.

THE Home Building Association of Havre de Grace, Md., has elected Hollins Courtney, president; Murray Vandiver, treasurer, and W. N. Coale, secretary.

THE last of the clearing-house certificates issued during July and August by Baltimore banks have been retired.

STEINER BROS., of Greenville, Ala., who recently failed, have made a proposition to their creditors to pay a third of their liabilities on January 1, 1895, 1896 and 1897. It will probably be accepted and the firm resume.

THE city of Winchester, Va., has sold \$10,000 worth of 5 per cent. bonds at a premium and has appropriated \$5000 of its sinking fund to pay its \$15,000 of indebtedness bearing 8 per cent. interest.

## RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 390.]

#### Shipping Grain via Port Royal.

A few days ago thirty-seven carloads or about 25,000 bushels of grain were shipped from Kansas City via the Kansas City, Fort Scott & Memphis Railway to Port Royal, S. C., for foreign export. This grain was sold by Messrs. Davidson & Smith to a firm in Liverpool. It was routed by the Kansas City, Fort Scott & Memphis to Memphis, Tenn.; Kansas City, Memphis & Birmingham to Birmingham, Ala.; Georgia Pacific to Atlanta, Ga.; Georgia Railway to Augusta, Ga.; Port Royal & Augusta Railway to Port Royal, S. C., and Johnston Line of steamers from Port Royal to Liverpool. Railway men and members of the Commercial Exchange of Kansas City say that the experiment is one of the utmost importance to Kansas City. If successful it will open an entirely new channel for export trade, thus furnishing the competition which is so essential to business. It will also shorten by many miles and many hours the distance between Kansas City and Liverpool. It is expected that Port Royal will be the export point for not only grain, but packing-house products and other articles which now reach Europe by way of New York. A dispatch from Kansas City also states that 250 carloads of corn are to be shipped from Kansas City to Liverpool via Port Royal. This will make three large cargoes.

#### Wants an Independent Line.

The Southwestern (Ga.) Railway directors have decided to again obtain control of the line and separate it from the Central system. It is proposed to form an independent line by acquiring the Montgomery & Eufaula or Mobile & Girard roads, or both, and refunding the present debt by giving a mortgage for \$6,000,000 on the company's property. This sum in bonds will be issued to include payment of the two lines the Southwestern wishes to control. By them it will secure a connection with the Louisville & Nashville.

#### Receivers for the Southwestern.

The outcome of the Chesapeake, Ohio & Southwestern trouble is that in the United States Circuit Court at Clarksville Judge Horace H. Lurton appointed General John Echols and St. John Boyle as receivers for the Chesapeake, Ohio & Southwestern. The application was made by C. P. Huntington and was resisted by the attorneys for the Commonwealth of Kentucky. The case was finally reached. Judge Lurton fixed the receivers' bonds at \$50,000 each.

#### Fast Railroad Building.

President S. A. Jones, of the Tampa & Chonotosassa road, writes the MANUFACTURERS' RECORD that work was commenced on the road on November 26, 1893, and the fourteen miles completed December 29, thirty-three days later. The road cost but \$8000 per mile. It is standard gage and is now in operation.

#### Georgia Railroad Elections.

A significant feature of the annual meeting of the Georgia Central, held at Savannah on January 1, was the absence of anyone representing the 42,000 shares of this company held by the Richmond Terminal. The ballots were cast by persons holding but 7999 shares, and the following board of directors was elected: H. M. Comer, Joseph Hull, H. R. Jackson, S. R. Jacques, U. B. Harold, J. B. Holst, Abraham Vetsburg, G. J. Mills, C. H. Phinizy, E. P. Howell, James Swann, W. S. Tyson and L. T. Turner. Mr. H. M. Comer was chosen president.

The annual meeting of the Augusta &

Savannah road resulted in the election of Gen. A. R. Lawton, president; Joseph D. Weed, vice-president, and H. H. Hull, secretary.

#### Washington-Baltimore Electric Line.

THE MANUFACTURERS' RECORD learns from high authority that the route over which the proposed Washington & Baltimore electric road will enter Baltimore has been decided upon by the company which will build the line. Two general routes have been considered—one by way of Catonsville and Ellicott City, which it was supposed would terminate on Edmondson avenue in Baltimore; the other is by way of the Washington road and through Relay, Md., on the Baltimore & Ohio road. The latter, which is said to be eight miles shorter than the former, has been adopted. The plan as outlined is to build the road from a point near the Mount Clare shops of the Baltimore & Ohio road, along McHenry street, in the southwestern part of the city, to Ramsey street. This street will be followed to Gwynn's falls, and that stream crossed by a bridge. The line will extend from Gwynn's falls in a direction parallel to Wilkins avenue, along which the City & Suburban Railway has laid a track for a short distance. The Washington-Baltimore road will begin track-laying on Wilkins avenue near the terminus of the other system, and follow this thoroughfare to a point near the Industrial School; thence it will continue in a direct line to the Washington road, following that to Relay.

The Fremont-street line of the Baltimore Traction Co., which is interested in the new road, terminates but a few squares from the city end of it and can easily be extended to meet it. The Carey-street electric line of the Baltimore Traction Co. can also be extended to its terminus and cars run over these tracts from Washington into the centre of the city if desired. An opportunity will be afforded the lines of the Traction Co. to be concentrated in southwest Baltimore. Already work has begun at Laurel, Md., but it is stated this is only to take possession of the right of way, and that no contracts have been let as yet.

#### Railroad Notes.

ALEXANDER SHAW, of Baltimore, has been elected a director of the Baltimore & Ohio system to succeed the late George De B. Keim.

J. D. RIDDELL has been appointed assistant freight agent of the Kansas City, Memphis & Birmingham, with headquarters at Birmingham.

J. G. HALL, of Hickory, N. C., has been appointed permanent receiver of the Chester & Lenoir narrow-gage road in that State.

THE gross earnings of the Georgia Southern & Florida for November were \$76,768.08; operating expenses, \$49,004.92; net earnings, \$27,762.16; operating expenses 64 per cent. The gross earnings of the Macon & Birmingham road for the month of November were \$7109.64; operating expenses, \$4517.47; net earnings, \$2592.17; operating expenses 63 per cent.

THE North Carolina Railroad Commission has submitted to Governor Carr its third annual report. It shows the total assessment of railroad property for four years as follows: 1890, \$12,321,704.00; 1891, \$18,423,298.26; 1892, \$19,726,760.56; 1893, \$24,228,954.69, a total increase since the establishment of a railroad commission of \$11,907,150.65, and nearly double the assessment of 1890. The report, commenting on the above figures, says: "This is an increased revenue of more than \$30,000 per year in State taxes alone, and including State, county and municipal taxes, more than \$100,000."

TOURISTS to Florida the present season will probably travel with more

comfort and in more luxury than ever before. On January 10 the Atlantic Coast Line will put in service a thoroughly equipped New York and Florida special vestibule train, leaving New York daily, except Sunday, at 12.10 in the afternoon and arriving at St. Augustine early the next evening. An important feature of the train will be that no excess fare over the regular vestibule sleeping-car rate will be charged.

THE Louisville & Nashville road has just issued a calendar for 1894 which is very artistic.

C. W. CHEERS, assistant general freight agent of the Kansas City, Memphis & Birmingham, with headquarters in Birmingham, Ala., has resigned. He will act in the same position for the Atlanta & West Point.

T. J. BARNARD, formerly with the East Tennessee, Virginia & Georgia Railway, has been appointed commercial freight agent of the Missouri Pacific system and the St. Louis, Iron Mountain & Southern system, with headquarters at Atlanta.

W. H. LUCAS has resigned his position as Florida agent of the Georgia Central system.

GALVESTON people are endeavoring to secure a share of the Western grain export trade. D. C. Imboden, of Galveston, has been conferring with the Kansas City Transportation Bureau, and a special freight schedule on grain to Galveston is to be arranged by that body.

G. A. McDONALD has been appointed general passenger agent, and G. R. Stone, general freight agent, of the Georgia Southern & Florida road.

JOHN MACLEOD has been appointed receiver for the Ohio Valley road, which is operated in connection with the Chesapeake, Ohio & Southwestern.

A. POPE has resigned his position as secretary of the Southern Railway and Steamship Association. W. L. McGill is his successor.

THE report of the railroad commissioner of North Carolina, just published, pays a very high but deserving compliment to the Norfolk & Southern. The commissioner states that the system known as the Norfolk & Southern is in the best condition of any road that runs into North Carolina. As to the best paying roads in that State, the Atlantic Coast Line heads the list, with the North Carolina second and the Norfolk & Southern third on the list.

THE Richmond & Danville Railroad Co. has issued an artistic "folder" describing the attractions of the health resorts of western North Carolina reached by its lines.

#### An Important Decision.

Cotton factors and carriers will be interested in a recent decision of the Massachusetts Court of Session. A number of bales of cotton were destroyed by fire while being transferred across the city of Boston from the New England & Savannah Steamship Co.'s wharf to a railway station. The cotton had been shipped from Newnan, Ga., by the New England and Savannah line and connecting railways. The plaintiffs claimed the drayman was the agent of the defendant, who was bound to see that the goods were safely delivered to the next common carrier in the line of transportation. The steamship company, on the other hand, claimed that the drayman was not its agent, but a connecting common carrier. The substance of the decision is, first, that there was no evidence that the fire was caused by any negligence for which the steamship company was responsible, and second, that the teamster, a public truckman, was a connecting carrier, so that there would be in any event no liability upon the steamship company for such a loss after the cotton had left the defendant's wharf.

## PHOSPHATES.

## The Reported Discoveries of Phosphate in Tennessee.

HOHENWALD, LEWIS CO., TENN., Dec. 30.  
*Editor Manufacturers' Record:*

No definite news in regard to the discoveries of phosphate in this section, lately reported, can be given yet. Analysis of the phosphate has been made by three different chemists, giving a fraction over 68 per cent. bone phosphate. Several companies are now being organized for the purpose of opening up the deposits. I believe the deposits will show up to be quite extensive, as it already shows up at different places for several miles, and it will probably be found in other localities in this belt of country. F. DE WITT SMITH.

## Florida Phosphate Production in 1893.

The phosphate industry of Florida has shown an additional degree of development during the year just closed, and from the statistics of exports to hand the MANUFACTURERS' RECORD presents in the following table the shipments from all ports in Florida and Georgia, giving also shipments by railroad and amount used in home consumption, with the comparative figures for 1892:

Point of Shipment.	1893. Long Tons.	1892. Long Tons.
Fernandina.....	126,694	125,012
Tampa.....	104,407	70,214
Punta Gorda.....	88,467	63,123
Savannah, Ga.....	36,507	7,412
Brunswick, Ga.....	8,000	18,061
Railroads.....	20,000	23,300
Consumed in Florida.....	7,000	4,000
Total tons.....	391,075	311,122

†Estimated.

## Phosphate Shipments from Savannah.

The shipments of phosphate from the port of Savannah are steadily on the increase, and the harbor advantages of this port will have a tendency to command a large export trade in this product in the future. The late concessions made by the railroads which leave the various points of production have swelled the exports for 1893 to 36,507 tons, of which 22,707 tons were high-grade Florida phosphate for foreign ports and 9,700 tons for domestic. Shipments of South Carolina rock amounted to 4,100 tons for home consumption. The following table represents the monthly shipments from Savannah for 1893, as reported by Messrs. J. M. Long & Co.:

Month.	Foreign shipments. Florida.	Domestic consumption.	
		Florida.	South Carolina.
January.....	1,000	500	500
February.....	1,100	500	500
March.....	1,000	300	300
April.....	6,539	500	500
May.....	4,772	700	300
June.....	500	300	300
July.....	2,400	500	300
August.....	4,300	700	500
September.....	1,000	500	500
October.....	1,561	1,300	200
November.....	500	500	200
December.....	3,224	500	300
Total, tons.	22,707	9,700	4,100

## Phosphate Markets.

OFFICE MANUFACTURERS' RECORD,  
 BALTIMORE, January 4.

A quiet market during the past week has been the rule, and the business in phosphate rock has been insignificant in volume. Values continue very steady, but the demand in local circles is limited at the moment. From producing points in Florida and South Carolina all reports agree as to the light offerings of phosphate rock. Several companies in Florida are mining and storing their output for better prices, and the most tempting offers fail to purchase their product. The arrivals of phosphate during the past week were as follows: Schooners Blanche Hopkins, with 870 tons; M. Luella Wood, with 800 tons; Edward G. Hight, with 710 tons, and

Mary S. Bradshaw, with 500 tons, all from Charleston, S. C. We note charters of schooners Anna T. Ebner and C. E. Schmidt, both Charleston to Baltimore. The brigantine Thos. Magee has been taken to load at Tampa, Fla., for Baltimore. The market at the close of the week is firm, with values as follows: South Carolina rock \$5.00 for Charleston, \$4.75 for Ashley river and \$5.00 to \$5.25 for Ashepoo, S. C., all f. o. b. Florida rock is unchanged at \$5.25 to \$5.50 for 60 per cent. river pebble, \$5.50 to \$6.00 for 65 per cent. and \$6.25 to \$6.50 for 70 per cent., all f. o. b. Charlotte Harbor or Tampa.

## FERTILIZER INGREDIENTS.

The market for ammoniates is very steady at quotations, with a fairly good demand for material for Southern and Western manufacturers' use. Nitrate of soda continues firm, with a good demand and fair supply. Table represents the prices current at this date.

Sulphate of ammonia.....	\$ 3.40@	\$ 3.75
Nitrate of soda.....	1.875@	2.00
Hoof meal.....	2.35@	—
Blood.....	2.60@	2.70
Azotine (beef).....	2.60@	2.70
Azotine (pork).....	2.60@	2.70
Tankage (concentrated).....	2.40@	—
Tankage (9 and 30).....	\$ 3.35 and 10 cts.	—
Tankage (7 and 30).....	20.00@	21.00
Fish (dry).....	27.00@	28.00
Fish (acid).....	18.00@	20.00

## CHARLESTON, January 2.

The past week has been a quiet one for the phosphate market at this port. Prices remain constant at \$4.50 for crude, \$5.00 to \$5.25 for hot-air dried and \$7.50 for ground rock. Coastwise shipments for the week were: Brig H. B. Hussy, 850 tons, for Weymouth; schooners S. B. Marts, 800 tons, for Baltimore; B. F. Lee, 600 tons, for Baltimore; A. Denike, 610 tons, for Baltimore; while in port and loading are the schooners E. C. Ross, C. E. Schmidt, Thomas N. Stone, Mary Williams and D. K. Baker. The export shipments from this port from September 1 to December 30, 1893, are 35,344 tons dry and 300 tons ground rock.

## Phosphate and Fertilizer Notes.

THE activity in phosphate shipments at Punta Gorda, Fla., during the year 1893 was much greater than the previous year, and the present facilities of that port for prompt loading will further increase its exports in the future. Mr. K. B. Harvey, sub-collector, has furnished the MANUFACTURERS' RECORD with the shipments for the year 1893, and the total is 88,467 tons, of which 19,278 tons were domestic and 69,189 tons foreign, against 21,809 tons domestic and 41,314 foreign, or a total of 63,123 tons for 1892. The following table represents the shipments during December, 1893:

Vessel.	Destination.	Tons.
Schr. A. & M. Carlisle.....	Mobile.....	493
Bark Golden Sunset.....	Bristol, Eng.....	850
Schr. W. H. Swan.....	Wilmington.....	1150
Bark Gera.....	Garston, Eng.....	1150
Brig Effendi.....	Garston, Eng.....	795
Stmp. Victoria.....	Garston, Eng.....	2150
Total.....		6590

THE shipments of phosphate from Fernandina showed up very well for December, aggregating 126,694 tons, making a grand total of 126,694 tons for the year 1893, against 123,062 tons for 1892, 54,271 tons for 1891 and 9748 tons for 1890.

IN the Anthony region of Florida there is considerable activity in the mining of phosphate. The French Phosphate Co. has a force of about 200 hands at work and has erected several buildings for its officers, besides putting its plant in first-class shape. The Lindner Phosphate Co. is working up to its full capacity, mining and storing its rock for a rising market. It is rumored that the Central Florida Phosphate Co. and the new company that recently bought the Krott plant and the mines connected with it will consolidate their interests and conduct the plants on joint account. There is

increased activity in the mining and shipping of soft phosphate. Among the prominent companies that operate largely in soft phosphate are the Standard Mining & Chemical Co., near Kendrick, and the Florida Pebble & Soft Phosphate Co. The Standard is a large shipper to Alabama, Tennessee, Mississippi, Virginia, Indiana and as far North as Massachusetts. The Florida Pebble Company will commence operations at once and expects to ship extensively during the year.

## Southern Textile Notes.

MR. GEORGE W. DAUGHERTY, for the last three and a-half years superintendent of the Victor Cotton Mills, at Charlotte, N. C., has resigned, and will at once take charge of the Henderson (Ky.) Cotton Mills. The Victor mill will, for the present, be operated under the immediate direction of its president, Mr. Geo. E. Wilson.

A NEW industrial enterprise is to be added to the list at Charlotte, N. C. It is to be called the Gold Crown Dye Works, and will be established by R. M. Oates, Jr., and Otto Zimmerle, of Zurich, Switzerland, they having formed a company for the purpose. Suitable quarters have been secured for the plant, and equipment will at once be installed for a daily dyeing capacity of 2000 pounds of hosiery and 3000 pounds of yarn. Black and fast colors will be dyed. Mr. Oates is president and secretary of the company.

THE Catawba Mills Co. has decided to double the capacity of its cotton mill at Chester, S. C., in the near future, and will soon proceed to negotiate for the additional machinery. This move is certainly evidence of prosperity and confidence in the future of the South's textile industry, as this company is a new one, having just completed and started its plant in 1893 with 5000 spindles, which is to be increased now with 5000 more. Mr. George R. Selby superintends the plant, which produces yarns only (20s to 30s). The company's capital stock is \$100,000, and its officers are J. W. Dunvant, president, and S. H. Latham, secretary and treasurer.

THE directors of the Victor Cotton Mills at Charlotte, N. C., at a meeting held last week, declared a semi-annual dividend of 3 per cent. This company operates 18,300 spindles, and its capital stock is \$150,000. Fine yarns, 20s to 30s, are produced. George E. Wilson is president; A. C. Hutchinson, secretary and treasurer.

THE Oakland Manufacturing Co.'s new woolen kersey mill, at Oakland, Carroll county, Md., is situated on the Patapsco river, from which an abundance of water can be obtained to operate the plant. The product is to be all the leading styles of kersey, and the company expects to commence manufacturing these goods by March 1. The different departments of the plant are the picker-room, carding, spinning and weaving-rooms, and the finishing factory. The dyehouse will dye all the materials used. The company is now procuring estimates on most of the machinery, including eight self-acting mules, 450 spindles each, forty broad looms (Knowles), finishing machinery of all kinds, shoddy pickers, burr pickers, lumpers, greasy pickers, etc. Mr. Nicholas W. Steele is general manager of the company, and can be addressed at Haight, Md.

THE Western Waterways Convention which is to meet at New Orleans January 9, will be composed of delegates from all the States along the Mississippi, Missouri and Ohio rivers, and will discuss all matters relating to the improvement of the navigable rivers of the West, to the protection and improvement of the harbors on those waters, and to the levees and protection from floods. Capt. D. B. Wood, of New Orleans, is chairman of the executive committee.

## COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

## The Markets for Cottonseed Products.

ROTTERDAM, December 16.

The market is somewhat better here, but very little business is doing now. America is reporting that the position is much better, and the large oil refiners have advanced their prices. Certainly a good business should have been done at our place the last two weeks, but the very small stock of the article does not allow any important transactions. The butterine manufacturers are not inclined to buy oil, lard or oleo oil to be shipped from America, but prefer to pay some guilders more for arrived goods. Butter-makers have never pleasure to run the risks of lower prices, of bad qualities etc. For instance, neutral lard is offered from America at about sixty-seven guilders, and the price for spot parcels here is about seventy-eight guilders to eighty guilders. This is about the same thing with oil business. At the same moment that oil was sold in America at a price of about thirty guilders, the obtainable value in Rotterdam for arrived oil was about thirty-seven guilders. Cablegrams received from New York and from New Orleans are stating that the obtainable price for choice oil is about thirty-four cents per gallon. The obtainable value for arrived oil here is thirty-three guilders per 100 kilos delivered, equal to about forty-three cents. The difference in price, about nine cents per gallon, is enormous. It is a fact that the oil refiners who have consigned their goods to our place are making a brilliant account, and are selling their goods about 20 per cent. higher than American values. If the demand for butterine should be more active, the butter-makers should be obliged to pay fancy prices for oil and neutral lard, because there is no stock of these articles here. The demand for butterine, however, is very unsatisfactory, because England is buying very little. England is reporting that about 13,000,000 pounds of Australian butter have arrived at the London market, and that this kind of butter has been sold at about fifty-six shillings per hundred-weight. This article is a big competitor of margarine butter. English customers think that Australian butter is better than margarine butter, and prices of the Australian butter are very cheap. For choice oil on the spot about thirty-three guilders is obtainable, but for oil due in December or January only thirty guilders to thirty-one guilders is obtainable. Certainly 20,000 or 30,000 barrels are on the way for Holland. G. W. SANCHES.

[NOTE.—The price in guilders per 100 kilos multiplied by 1.34 will give the price in cents per gallon.—ED.]

THE Tennessee State commission on improvement of waterways has reported to the governor that the proposed Tennessee and Mississippi river canal can be built in four years by convict labor, at a cost of \$650,000 a year.

A TELEPHONE line connecting Cape Charles, Va., with Lewes, Del., and extending along the eastern shore of the Chesapeake bay has just been completed.

THE citizens of Macon, Ga., are considering the question of having an elaborate exposition in connection with the State fair in that city in 1894.

THE New York, Mobile & Mexican Steamship Co. has decided to carry passengers in addition to its regular freight business between Mobile and Mexican ports.

DURING 1893 2450 new buildings were erected in Baltimore.



**MECHANICAL.****Myers Sure-Grip Hay-Sling Carriers.**

The object in the construction of this machine was to make a device that would

To make a carrier that will answer for all these different methods of unloading hay and grain requires a peculiar lock, something that will register and retain any sized bundle at any point of elevation. The ordinary registering style of lock

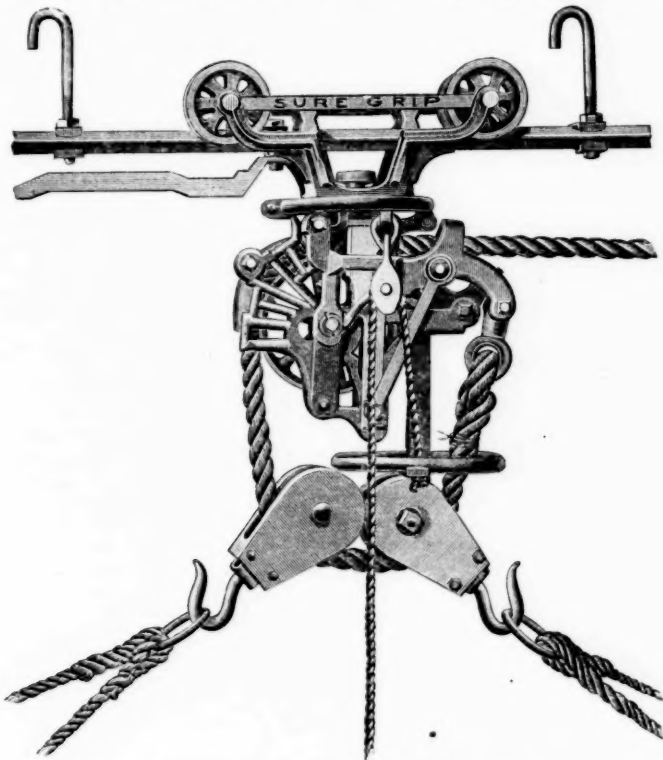


FIG. 489.—MYERS'S SURE-GRIP HAY-SLING CARRIER.

have unusual capacity for unloading hay, sheaf grain, corn fodder, and, in fact, all kinds of crops raised by the farmer, by using what is termed a sling in the wagon whereby the load is divided into three or four bundles, as the operator may desire (see Fig. 489), or its construction is specially

whereby the pulley block is gripped in the frame of the carrier would not, it is claimed, answer for these different requirements. Messrs. F. E. Myers & Bro., Ashland, Ohio, have, therefore, constructed this machine with a rope lock, which is accomplished by tilting the pulley in the carrier,

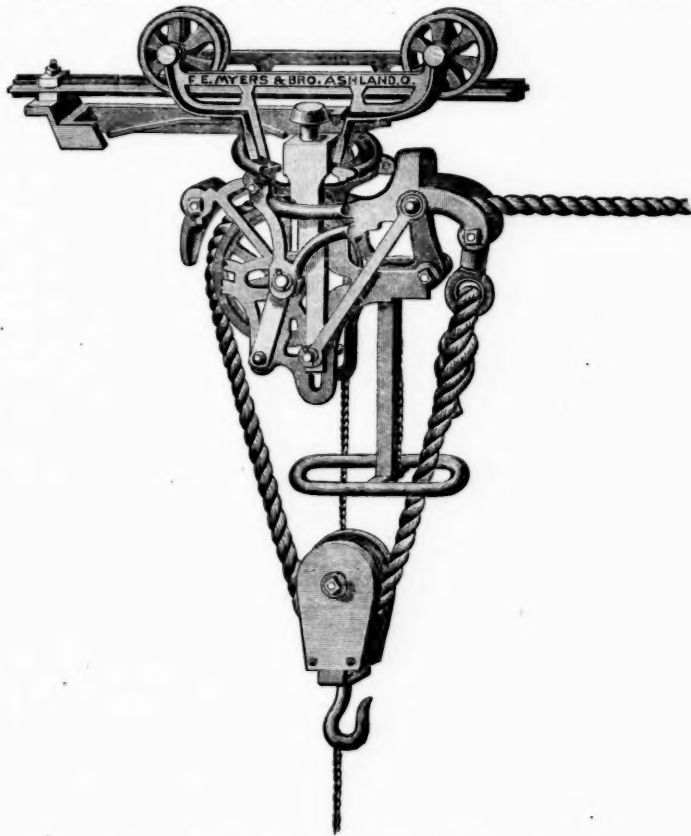


FIG. 496.—MYERS'S SURE-GRIP HAY-SLING CARRIER.

adapted to the use of two hay forks, one on each pulley block, which has been found to be a very rapid method for unloading hay. By removing one pulley block, (see Fig. 496), which are arranged with loose pin, it will operate same as the ordinary hay carrier with one hay fork.

allowing the rubber block to remain in a fixed position. This operation will be better understood by referring to the sectional cut (Fig. 496). When the carrier is retained in the stop while elevating the bundle, the working parts are perfectly free, but the instant the pulley blocks strike

the depending bail, or it is tripped by the hand trip and the carrier moves away from the stop, the weight of the load causes the rope sheave to travel back against the rubber block, gripping the rope firmly and retaining the bundle. The operation of retaining the bundle is a self-compensating device, and additional load always means additional power with which to retain it, making a positive and reliable lock for retaining any sized bundle at any elevation, the importance of which is fully understood by anyone familiar with the construction required in a hay and grain conveyor to be operated in connection with slings.

Many large barns are being constructed

required from given sizes. This head will not, it is said, get out of repair, as it is of the simplest construction. This head being made of one single blade, can be recommended, the manufacturers claim, as being "the best, cheapest and most practical of any cutterhead now on the market."

The Pennsylvania Machine Co., Limited, of Philadelphia, the makers, say: "We warrant our saws to do perfect work on any kind of stock without leaving rough or ragged edges. We also claim that we can do one-third more work in the same space of time, with less power, than is necessary for any other head, as no time is lost in setting up our head."

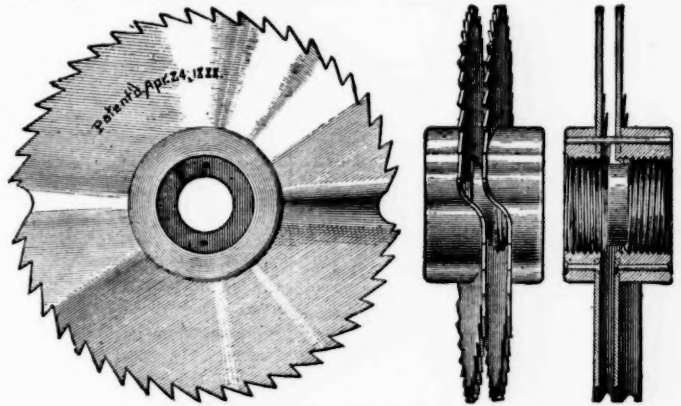


FIG. 1.—THE LAMSON ADJUSTABLE CUTTERHEAD.

without cross timbers, so that a load of hay can be carried over into the mow immediately after it is elevated sufficiently to be free from the load, requiring a carrier of a design that does not need to elevate the bundle entirely to the track before it will relieve itself from the stop.

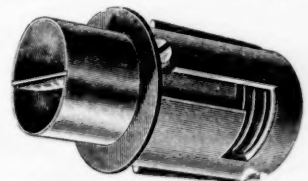
To meet this demand the manufacturers attach a tripping device to the depending arm, whereby the operator on the wagon has full control to release the carrier from the stop the instant the load is elevated sufficiently to travel into the mow by simply tripping the lock device by means of the small rope. These important advantages are secured by the special construction and locking device of this carrier.

Another point in its construction that is of vital importance in general use is the fact that it is swivel reversible and will operate equally well in either direction from the stop, the stop being so arranged as to allow the carrier to approach it in any manner or from any direction it may come. It will reverse whether in the stop or away from the stop.

The rope wheel in the carrier is six inches in diameter, thus giving it a great power in elevating the bundle. It is constructed throughout of malleable iron and

**Gardner Ventilating Sash Bolt.**

Attention is invited to our illustration of the Gardner ventilating sash bolt. For ventilation by night or day either sash may be locked and left open six inches, or both may be, thereby leaving too little space for



GARDNER VENTILATING SASH BOLT.

tramp or burglar to enter. This bolt is neat and out of sight when out of use and cannot be broken. Particulars will be sent free on application to G. C. Gardner, Gardner Sash Balance Co., 311-168 Dearborn street, Chicago, Ill.

**New Military Post.**

A dispatch from St. Augustine announces that government engineers have been preparing a map of Anastasia Island, near that city, preliminary to erecting buildings for a military post. The United States reserva-



FIG. 2.—SOLID CUTTERHEAD.



FIG. 3.—SPECIAL DADO HEAD.

steel, is made unusually strong in all its parts, and is designed for hard usage and to elevate heavy loads.

The slings used in connection with this carrier trip in the centre and have two spreaders to each half.

**The Lamson Adjustable Cutterhead.**

This groove and dado head is composed of two saw blades, as shown by the engraving, and is adjusted by a screw in the hub, which is operated with a small fork wrench or key, and can be set to any size

tion consists of 600 acres, and it is said to present many advantages as to location and healthfulness. Secretary Carlisle has asked Congress for \$100,000 for constructing the necessary buildings and laying out the grounds. Engineer Glazier has been making the survey of the island.

THE American, of Nashville, has been sold to a company, of which James M. Head is president, and W. McNally, secretary. It will still be published as a democratic daily paper.

## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department, on pages 389 and 390.]

## Lumber Directory.

Readers of the MANUFACTURERS' RECORD who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

## Large Timber Land Owners of Carolina

The following is a list of persons and corporations that own large tracts of timber land in the State of Louisiana, to the extent of 20,000 acres and over. The list embraces only unimproved tracts of heavy forests of pine and hardwoods:

Owners.	Residence.	Acres.
Carpenter & Van Schack	Chicago	100,000
Hackley & Hume	Michigan	70,000
N. B. Brady & Co.	Michigan	50,000
W. W. Cumer	Michigan	50,000
Hovey & McCracken	Michigan	45,000
Eddy Bros.	Michigan	40,000
Avery Bros.	Michigan	30,000
Pack, Woods & Co.	Michigan	70,000
Morley Bros.	Michigan	20,000
C. A. Morrow	Illinois	50,000
Head, Dexter & Co.	Illinois	50,000
Lutcher & Moore	Orange, Tex.	140,000
H. A. J. Upham	Wisconsin	25,000
Howett Land Co.	N. Orleans, La.	100,000
F. B. Williams	Paterson, La.	92,000
La. Cypress Lumber Co.	Harvey, La.	25,000
Ruddock Lumber Co.	Ruddock, La.	22,000
Smith, Fryar & Co.	New York	50,000
Post, Martin & Co.	New York	23,000
Calvin Pardee	Philadelphia	100,000
Charles W. Henry	Philadelphia	85,000
W. W. Frazier	Philadelphia	60,000
The Boston Land Co.	Massachusetts	100,000
Hamlin & Wetmore	Pennsylvania	40,000
Chesbrough Bros. & Co.	Ohio	50,000
Leather & Smith	Wisconsin	50,000
Pemoyer & Brackimp	Wisconsin	50,000
English Land & Loan Co.	England	80,000
J. B. Watkins Syndicate	Louisiana	400,000
Estate A. C. Brown	Wisconsin	60,000
Baldwin Heirs.	Louisiana	53,000
Various firms, companies and individuals who own from 10,000 to 15,000 acres as assessed		620,000
Total acres		2,800,000

## LUMBER MARKET REVIEWS.

## Baltimore.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, January 4.

In every branch of the lumber industry there is a quiet tone, and during the past week the business has been unimportant. At this particular season commission men and others are closing up the business of the old year, and no activity in trade is expected. There is, however, a fair outlook for business, and a good demand for lumber is expected later on. Shippers of kiln-dried North Carolina yellow pine have had a fair demand, and prices are generally firm. In air-dried lumber receipts have been liberal, but prices have ruled irregular, and the shipper is advised to hold his consignments for several weeks until trade revives. White pine is steady, with stocks not excessive and the demand limited. There is very little inquiry for hardwoods, as manufacturers are not purchasing to any extent, and fancy woodworking factories are generally quiet. Box factories are running on short time and are only purchasing for immediate wants. There is a good local demand for building purposes, and considerable material will be required to rebuild the burnt district, and from other sources there will be a good inquiry shortly.

The following table represents the prices current at this date:

VIRGINIA AND NORTH CAROLINA PINE.	
5-4x10 No. 2, kiln dried	\$16 25/100
5-4x12 No. 2, " "	17 75/100
4-4x10 No. 1, " "	19 75/100
4-4x12 No. 1, " "	20 75/100
4-4 narrow edge, No. 1, kiln dried	17 25/100
4-4 wide edge, " "	21 75/100
6-4x8, 10 and 12, " "	23 25/100
4-4 No. 1 edge flooring, air dried	15 00/100
4-4 No. 2 edge flooring, " "	12 00/100
4-4 No. 1 12-inch stock, " "	16 00/100
4-4 No. 2 " "	13 00/100
4-4 edge box or rough wide	9 00/100
4-4 " " (ordin'y widths)	9 00/100
4-4 " " (narrow)	7 50/100
4-4x12 " "	10 50/100
3-4 narrow edge, " "	8 50/100
3-4 all widths, " "	8 50/100
3-4 10x16 wide, " "	9 50/100
Small joints, 2 1/2-12, 14 and 16 long	7 50/100
Large joints, 3-16 long and up	10 00/100
Scantling, 2x3-16 and up	9 50/100
WHITE PINE.	
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4	48 00/100
3d clear, 4-4, 5-4, 6-4 and 8-4	43 00/100

Good edge culls	14 00/100	15 00
Good stock	17 00/100	17 50
CYPRESS.		
4-4x6, No. 1	19 00/100	21 00
4-4x6, No. 2	15 00/100	15 50
4-4x6, 16 feet, fencing	12 00/100	13 50
4-4x6, rough	9 50/100	10 00
4-4 rough edge	9 50/100	10 00
4-4 edge, No. 1	15 00/100	20 00
4-4 No. 2	12 50/100	13 50
HARDWOODS.		
Walnut.		
5-8, Nos. 1 and 2	75 00/100	100 00
4-4, Nos. 1 and 2	90 00/100	100 00
5-4, 6-4 and 8-4	95 00/100	110 00
Newell stuff, clear of heart	112 50/100	125 00
Culls	30 00/100	35 00
Oak.		
Cabinet, white and red, plain-sawed and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4	30 00/100	35 00
Quartered white, 1 and 2 quality, all figured, 6 inches and up wide, 4-4	52 50/100	55 50
Culls	10 00/100	15 00
Poplar.		
Nos. 1 and 2, 5 8	25 00/100	26 00
" " 4-4	28 00/100	31 50
Nos. 1 and 2, 6 and 8 4	32 00/100	33 00
Culls	14 00/100	15 00
SHINGLES.		
Cypress, No. 1 hearts, sawed, 6x20	7 50/100	7 75
No. 1 saps, sawed, 6x20	5 50/100	6 00
No. 1 hearts, shaved, 6x20	6 50/100	7 00
No. 1 saps, shaved, 6x20	5 00/100	5 50
LATHS.		
White pine	2 65/100	2 70
Spruce	2 15/100	2 25
Cypress	2 15/100	2 25

## Norfolk.

[From our own Correspondent.]

## NORFOLK, VA., January 2.

With the opening of the new year the lumber industry in nearly every department seems to show increased activity. Millmen and manufacturers are looking forward to a more prosperous year than that of 1893, and about the only element that disturbs the general situation is the outcome of the tariff question. The operations during the past year in lumber have been somewhat restricted by the financial depression, but in the main the industry has not been seriously affected, as with a few months activity matters will be in better shape than ever. The demand during the past three months has been on the increase, and at the moment orders for dry-kiln yellow pine timber are mostly for prompt delivery. As usual at this season, the affairs of the old year are being wound up and plans laid for the future, so that business for several weeks will not assume any decided character. Prices on kiln-dried yellow pine are quite firm and the schedule figures of the association fully maintained. Receipts of air-dried lumber are more liberal, and under a limited inquiry values are easy. There is a fair movement in dressed lumber, and it is expected that all the planing mills will be running on full time next week. The demand for lumber for local building purposes is improving, and from the number of buildings in course of erection and those projected, it is safe to say that the current year will be a much more active one in this line than last year. The following table of receipts of lumber and other wood products at this port for 1893, as reported by Mr. Samuel P. Brown, secretary of the Norfolk Chamber of Commerce, will be interesting to those engaged in the lumber industry.

Receipts of lumber, etc., at the port of Norfolk from January 1, 1893, to December 31, inclusive, with comparative figures for 1892:

Material.	1893	1892
Lumber, feet	293,493,554	293,725,122
Logs, feet	113,268,656	113,386,459
Staves, M	6,571,181	8,788,917
Shingles, M	44,281,103	47,790,656
Railroad ties, M	159,673	631,425

## Charleston.

[From our own Correspondent.]

## CHARLESTON, S. C., January 2.

The volume of transactions in the lumber market during the past week has been rather better than usual, and the outlook for a more active business during the coming year is more encouraging. There is a good demand from Northern ports and from the West Indies for choice grades and dimensions of lumber, and several orders for cargoes have been received during the week. Prices, however, continue to show a narrow margin of profit, but the market

is very steady under the present demand. The shipments of lumber during the past week were as follows: For New York, per schooners Almeda Willey, 334,000 feet, and Florence Randall, 577,800 feet, and by steamer, 14,000 feet and 20,000 shingles; for Philadelphia, schooner William C. Wickham, with 364,000 feet, and for Kingston, Jamaica, schooner Nellie Coleman, with 75,000 feet and 20,000 shingles. The total shipments from this port since September 1, 1893, to December 31, inclusive, amount to 13,951,144 feet to domestic ports and 1,370,000 feet to foreign, making a total of 15,321,144 feet, against 17,935,075 for the corresponding period in 1892-93. Freight on yellow pine are quiet, with a fair offering of handy-sized vessels. Rates continue firm and unchanged at \$4 87 1/2 to New York.

## Savannah.

[From our own Correspondent.]

## SAVANNAH, GA., January 2.

Business in every department of the lumber industry is rather quiet at the moment, but shortly will show its accustomed activity. Millmen are winding up the affairs of the old year, and from all appearances are getting into shape for a good trade. The demand has been fair during the week, and from several new sources orders have been received for some good-sized bills of lumber. The shipments during the past week were 86,000 feet to Baltimore, 45,856 feet to Boston and 660,000 feet and 100,000 shingles to New York. The shipments for the year ending December 31, 1893, aggregate 107,962,546 feet of lumber, which is a large decrease compared with 1891-92, readily accounted for by the extreme depression in the industry during last year. Reports from the saw-mill section of this State adjacent to the city are favorable, and mills are generally resuming operations. Prices continue very steady for all choice grades of lumber and are as follows: Easy sizes \$11 25, ordinary sizes \$12.00 to \$16.50, difficult sizes \$13.00 to \$25.00, flooring boards \$14.50 to \$22.00 and shipstuffs \$16.50 to \$25.00. Lumber freights are quiet, with a fair offering of handy-sized tonnage. The rates from this and nearby ports of Georgia are quoted at \$4 25 to \$5.25 for a range including Baltimore and Portland, Me. Steamer rates to New York and Philadelphia are quoted \$7.00, to Boston \$8.00 and to Baltimore \$5.50.

## Mobile.

[From our own Correspondent.]

## MOBILE, ALA., January 2.

The lumber and timber industry of this port has been quiet, as usual during the holiday season. The outlook, however, is considered favorable for a better timber trade during the current year. European advices report the market as in better condition, with values firmer and stocks somewhat reduced. Stocks of timber here are light, and we hear of several cargoes to be shipped during the month of January. The schooner Asiana cleared during the week for Manchester, England, with 2207 cubic feet of sawn timber and 44,339 cubic feet of hewn timber. The lumber trade is fairly active, with a good demand from Northern ports and from Mexico and South and Central America. The principal shipments of lumber during the past week were to the West Indies and Mexico, and embraced 1,927,747 feet. The total shipments of lumber since September 1 are 18,901,619 feet, against 20,463,242 feet for the corresponding period last year. The demand from foreign ports for lumber of choice grades and quality is rapidly increasing, the class of material shipped finding great favor with foreign buyers. In timber prices are steady, and hewn timber placed upon the market will bring about ten and a-half to twelve cents per cubic foot for 100 feet average and classing B1 good. Hewn oak and poplar are in light request. Sawn timber is firm at eleven cents per

cubic foot, basis of forty feet average. Saw logs delivered at mill are quoted at \$4.50 to \$7.50 per thousand feet.

## Beaumont.

BEAUMONT, TEXAS, January 2.

Throughout the lumber section of southeastern Texas the market is generally quiet and millmen are enjoying the holiday festivities. The various milling companies are winding up the affairs of the old year and making preparations for the new, while the general market is steady and the outlook on the whole is encouraging. There has been considerable business reported during the past week, notably in the tie and timber trade. There are a number of good orders offering and several good-sized ones have been placed during the week. Manufacturers are of the opinion that there will be a speedy revival in the lumber trade, and millmen generally are putting their various plants in order to meet the requirements of trade. The Reliance Lumber Co., in its circular of this date, says: "We begin the new year with renewed vigor and energy, encouraged with the anticipation of an early and substantial revival of trade." This company is among the first in progress, and has one of the best appointed saw-mill plants in the country. Among its first orders booked for the new year is one for 60,000 ties, nearly 2,000,000 feet, the order to be delivered in three months. Work on its new dry-kiln is progressing rapidly, and will be ready for operating the latter part of the current month. The company started its mills on the 27th ult. The Beaumont Lumber Co. also started on the same date, and the Texas Tram & Lumber Co. expects to start tomorrow. At Orange, Texas, everyone is enjoying the holidays, and but little attention has been given to the lumber industry this week. The mills, however, are all in good shape and ready for business. Mr. L. Miller, of the L. Miller Shingle Co., is getting ready to enlarge his plant, and will turn out this year about double the quantity he did last. The recent rain has been worth thousands of dollars to the milling interests here, and there has been a sufficient rise in the Neches river and tributaries to drive all the logs required. The demand for shingles continues fairly active, and stocks in this section are becoming somewhat depleted, while prices continue firm.

## Literary Notes.

EVENING TALES. Translated from the French of Frederic Ortolli by Joel Chandler Harris. New York: Charles Scribner's Sons. Price \$1.00.

This book gives the animal stories familiar to all nations as they appear to the French. This form of tale ever charms the mind of childhood and awakens the interest of children of larger growth. We find that Uncle Remus, who has made us acquainted with the ways of "Brer Fox" and "Brer Rabbit" in American folklore, listens with delighted interest while Mrs. Ortolli's books the adventures of "Brother Goat" and "Brother Rabbit," the Wolf and the Snail and "Teenchy Duck" to her children. Besides the animal stories, there are several fairy tales, such as "The Enchanted Princess" and "A Child of the Roses." In the translation Mr. Harris has added raciness to these stories by his own piquant style and his free adaptation of French imagination to American readers.

THE steamship Gloucester, of the Merchants & Miners' Transportation Co., has made the fastest run of any coasting vessel between Norfolk and Boston. Her time was thirty-five hours. The Gloucester was built by the Maryland Steel Co., of Sparrow's Point, Md.

THE population of Savannah, Ga., has been increased by annexing suburbs with 5000 population to the city limits.



# CONSTRUCTION DEPARTMENT.

**WE PUBLISH**, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

\* Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

\*\* In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

## ALABAMA.

**Albertville—Silver Mine.**—John P. McDuffie is said to be developing a silver mine near Albertville.

**Anniston—Pipe Works.**—The Anniston Pipe & Foundry Co. has been formed with F. C. Miller, of Newport, Ky., president; J. K. Dimmick, of Anniston, vice-president and general manager; H. B. Cooper, of Anniston, secretary, and H. C. Peters, of New York, treasurer. The company has purchased the Anniston Pipe and Foundry Works and will continue its operation. Ample capital has, it is reported, been subscribed and operations are to commence immediately.

**Bessemer—Rolling Mill.**—A special dispatch from Bessemer states that the Bessemer Rolling Mill will at once be put in operation by New York and Nashville capitalists, who, it is said, have completed arrangements for this purpose. Morris Adler, of Birmingham, and associates own the plant.

**Birmingham—Horn and Meal Mill.**—B. B. Comer is building a meal and hominy mill, and all machinery has been purchased from the Nordyke & Marmon Co., of Indianapolis, Ind.

**Cordova—Saw Mill.**—A Mr. Redding, of Nashville, Tenn., will, it is stated, build a large saw mill in Cordova.

**Guntersville—Repair Shop.**—W. A. Kearney has built a new blacksmith and wood shop.

**Montgomery—Sugar Refinery, etc.**—The Southern Refining Co., noted last week as incorporated, will only do work of a preliminary nature during the winter, and will establish its proposed plant in the summer.\*

## ARKANSAS.

**Arkansas City—Levees.**—J. M. Whitehill, of Memphis, Tenn., has been awarded contract for 310,000 yards of levees, composing sections 1 and 2 of the Panther Forest Short Line in Arkansas. The bid was seventeen and one-half cents per cubic yard in section 1 and eighteen and three-fourths cents in section 2, and the contract calls for completion of the work by March 1, 1895.

**Helena—Saw Mills.**—The Schutte Lumber Co. has been incorporated with a capital stock of \$50,000, \$16,000 of which is paid in, and its purposes are to operate saw mills, manufacture and sell lumber. Charles Schutte is president; E. T. Gloeckler, vice-president; J. E. Schutte, secretary, and Henry Schutte, treasurer.

**Searcy—Broom Factory.**—Charles Linsley will establish a broom factory of thirty-six dozen capacity weekly.

**Warren—Brick and Pipe Works.**—J. N. Wheeler is interested in a plan to organize a company for the erection of a vitrified brick and sewer-pipe works, and he desires to correspond with some party understanding the practical part of the business.\*

**Wilmar—Capital Increase.**—The Gates Lumber Co. has increased its capital stock from \$50,000 to \$100,000. A. H. Gates, president.

## FLORIDA.

**Cocoa—Ice Factory.**—An ice factory is in course of erection, it is reported.

**Fort Meade—Phosphate Mines.**—The Phoenix Phosphate Co., lately noted as incorporated, has been organized with a capital of \$150,000. A. B. Campbell is president; Charles Marvin, vice-president, and C. C. Robertson, treasurer.

Works are fully equipped, and mining will probably commence this month.

**Fort Worth—Grain Elevator.**—A plan is afoot for the erection of a large grain elevator by a new company on the Santa Fe Railroad reservation. No details are as yet obtainable, but it is claimed that the project is reasonably assured.

**Gainesville—Paper Mill.**—A report states that an Indiana party is desirous of establishing a paper mill in Gainesville.

**Key West—Ice Factory and Cold-storage Plant.**—The Key West Pure Ice Co. will put in an additional ice machine of twenty tons capacity daily, and will also equip a cold-storage plant. Machinery has been arranged for.

**Palatka—New Machinery.**—The Palatka Ice Co. is putting a new 100 horse-power boiler in its ice factory.

**Tallahassee—Saw and Planing Mill, etc.**—The Georgia & Florida Investment Co. has awarded contract, it is reported, for the erection of a milling plant, planing mill, dry-kiln, etc. The mill will have a capacity of 80,000 feet of lumber daily and the kiln 40,000 daily. The plant will be located at the Ocklocknee, on the C. T. & G. R. R.

## GEORGIA.

**Auraria—Gold Mine and Plant.**—E. W. Coleman & Co., now developing the Wells gold mine in conjunction with J. T. Whitener, intend to form a stock company and incorporate in the near future. Pump, hoisting engine, stamp mill and other necessary apparatus will be put in.

**Etna—Washing Plant.**—The Etna Furnace Co. will erect a new washing plant.\*

**Macon—Wall-paper Factory.**—The Swedish-American Wall Paper Manufacturing Co., of Harriman, Tenn., contemplates erecting a branch factory in Macon, and is now conferring with the advertising bureau relative to same.

**Savannah—Drug Company.**—The Southern Drug Co. has been incorporated with a capital stock of \$10,000 for the purpose of dealing in and manufacturing drugs and chemicals. James R. Rogers, George L. Walker and Jno. T. Grantham are the incorporators.

**Savannah—Spring-bed Works.**—C. P. Miller contemplates establishing works for the manufacture of spring beds.\*

**Tallahassee—Dynamite and Powder Mill.**—J. M. McBride, M. S. Johnson and A. Moss have incorporated the Southern Dynamite & Powder Co. to operate the mill near Tallahassee. The capital stock is \$25,000.

**Waycross—New Machinery.**—M. Albertson has leased the Satilla Manufacturing Co.'s planing mill, and will increase its capacity by putting in either band or gang saws for resawing cants into rift flooring strips.

## KENTUCKY.

**Frankfort—Broom Factory.**—W. W. Richardson, a Chicago broom manufacturer, has lately been investigating at Frankfort relative to the establishment of a broom factory to employ the convict-labor of the State penitentiary.

**Henderson—Steamboat Company.**—C. G. Perkins, Annie T. Perkins, J. B. Thompson and Robt. D. Vance have incorporated the Ohio River Line Steamboat Co. for the purpose of building, owning and operating steamboats on the Ohio and Mississippi rivers. The capital stock is \$50,000.

**Hopkinsville—Water Works.**—The Hopkinsville Water, Light & Power Co. contemplates building a water-works system. The town's population is 7500.

**Louisville—Tannery.**—E. P. Mooney & Co. will probably rebuild their tannery reported as burned, as the plant was insured.

**Louisville—Clothing Factory.**—P. H. and W. W. Tapp, James S. Carr, H. C. Turner and A. A. Morris have incorporated Tapp, Leathers & Co. for the purpose of manufacturing and dealing in clothing and furnishing goods of all kinds: The capital stock is \$100,000, \$50,000 of which is paid in. Factory is now in operation.

## LOUISIANA.

**Evergreen—Sugar Refinery.**—O. M. Wilson and associates will build a refinery of 600 tons capacity daily.

**New Orleans—Livery, etc.**—The Johnson & Son Co., Limited, has been incorporated to conduct a livery and undertaking business. Robert C. Davey is president; Frank R. Johnson, vice-president and treasurer, and Henry Thorp, secretary. The capital stock is \$25,000.

**Saint Martinville—Sugar Refinery.**—Robert Martin, president of the Bank of St. Martin, will build a sugar refinery of 600 tons per day capacity at or near Saint Martinville.

## MARYLAND.

**Baltimore—Fertilizer Factory.**—F. Miller, of Baltimore; Thomas H. Roberts, of Harford county,

and D. C. Standiford, of Baltimore county, have organized the Miller Fertilizer Co. to succeed H. S. Miller & Co., of Newark, N. J. The factory is located on Smith's wharf, in Baltimore, and is now in operation.

**Baltimore—Manufacturing.**—Duncan McPherson, Jr., Jno. T. Woodward, R. H. Woodward, Chas. T. Fleet and Albert Curet, Jr., have incorporated the R. H. Woodward Co. for the purpose of manufacturing for publication purposes. The capital stock is \$10,000.

**Salisbury—Basket and Crate Factory.**—The berry-crate and basket factory, which has been idle for several months, has been purchased by A. W. Robinson, W. H. Knowles and J. H. Marvill, of Laurel, Del., and put in operation.

**Georgetown, D. C.—Wood Mill.**—Tavener Bros. have recently put in kindling-wood machinery.

**Washington, D. C.—Electric-light Plant.**—It is reported that a \$200,000 electric-light plant will be built for the Capitol and new Congressional Library buildings.

**Washington, D. C.—Crematory.**—The National Sanitary Co., whose garbage crematory was recently burned, is still endeavoring to arrange for the rebuilding of the plant. A meeting of stockholders will be held shortly to definitely decide the matter.

## MISSISSIPPI.

**Biloxi—Ice Plant.**—An ice plant is reported as in course of erection.

**Scranton—Water Works.**—A system of water works will, it is reported, be constructed, supply to be secured from artesian wells. The city clerk can probably give information.

**Vicksburg—Steam Laundry.**—The Troy Steam Laundry Co. has lately been incorporated with a capital stock of \$6000.

## MISSOURI.

**Bolivar—Water Works.**—The city will construct a system of water works. R. M. Dysart, mayor, can give information.\*

**Hickory Hill—Coal Mines, etc.**—The Hickory Hill Coal & Coke Co. has been incorporated to mine coal and manufacture coke. The capital stock is placed at \$2,500,000.

**Kansas City—Mines.**—Frederick Howard, C. W. Gilbert, T. A. F. Jones and Sidney Smith have incorporated the Oak Tree Mining Co. with a capital stock of \$10,000.

**Kirksville—Water Works.**—The city will hold an election on January 16 for the purpose of ratifying or rejecting an ordinance in relation to issuing bonds for \$20,000 for the purpose of constructing water works. Address J. W. Tinsman, mayor.

**Lamar—Water Works.**—It is said that water works will be built. The mayor can give information.

**Manchester—Mills.**—Jacob Schreiner, Charles E. Flack and B. F. Ferguson have incorporated the Manchester Milling Co. with a capital stock of \$10,000.

**Poplar Bluff—Water Works.**—The city will shortly contract for the construction of the water works noted in last week's MANUFACTURERS' RECORD. The mayor can give information.\*

**St. Louis—Implement Company.**—John A. Arndt, C. W. Fisher and George F. Smith have incorporated the Arndt-Fisher Implement & Transfer Co. with a capital stock of \$10,000.

**St. Louis—Machine Company.**—S. Price, H. W. Eliot and others have incorporated the Sterling-Morean Machine Co. with a capital of \$2000.

**St. Louis—Grain Company.**—Jacob Schreiner, C. E. Flack, H. W. Daub and Richard E. Roper have incorporated the Schreiner Flack Grain Co. with a capital stock of \$50,000.

**St. Louis—Grain Company.**—Samuel A. Culver, Jr., Samuel A. Culver, Sr., and James G. MacGinnitie have incorporated the Culver Grain Co.

## NORTH CAROLINA.

**Asheville—Gas Plant.**—The Asheville Street Railway Co. will, it is said, enlarge and improve its gas plant.

**Charlotte—Dye Works.**—R. M. Oates, Jr., and Otto Zimmerle, Jr., of Zurich, Switzerland, have formed the Gold Crown Dye Works, and will at once equip a plant of 2000 pounds of hosiery and 3000 pounds of yarn daily. Mr. Oates is president and secretary of the company.

**Charlotte—Hosiery Mill.**—Information has been received that there is probably no truth in the report of a new hosiery mill noted in last week's MANUFACTURERS' RECORD.

**Edenton—Planing Mill.**—The Pease United Lumber Co. will put new planers in its planing mill in the near future.

**Georgeville—Gold Mines and Mill.**—Richard Eames, Jr., now operating the Nugget gold mine

for a New York company, will soon operate the Glen Brook gold mine with a 60 stamp mill.

**Moncure—Gold Mine and Plant.**—The Eduardo gold mine, reported in the last issue of the MANUFACTURERS' RECORD, is to be developed by Eduardo F. R. Dawe and Ellef Hanson, from Missoula, Montana. Messrs. Hanson and Dawe report the ground as richer than usual, and they intend to put in hydraulic apparatus and institute developments on an extensive scale. The firm has a branch office in care of the Argus, Goldboro, N. C., where mail will reach them promptly.

## SOUTH CAROLINA.

**Aiken—Clay Beds.**—It is said that the Aiken Fire & Ornamental Brick Co. will develop at once a new clay bed just found on its property.

**Aiken—Cotton Mill.**—Thomas Barrett, president of the Langley Manufacturing Co., and Chas. Estes, president of the Jno. P. King Manufacturing Co., both of Augusta, Ga., have, it is reported, purchased a one-fifth interest in the Bath Paper Mill Co.'s mill, which was lately bought at public sale by F. E. Henderson and Mr. Dibble, both of Aiken. These parties, we are informed, will remodel and enlarge the mill and convert it into a cotton factory.

**Charleston—Bagging Factory.**—The Charleston Bagging Manufacturing Co. will at once repair the weaving department of its factory, which was damaged by fire last week.

**Charleston—Cotton Mill.**—Robert F. Barker, of Manchester, England, is now in Charleston and is interested in the construction of a mill for making lace, fancy goods, worsteds, silk, etc. It is said that Mr. Barker is receiving great encouragement from parties in and out of the city, and the project may assume some shape in a few weeks.

**Chester—Cotton Mill.**—The Catawba Mills Co. is reported as to double its capacity, which means the addition of 5000 spindles. S. B. Latham is secretary.

**Graniteville—Clay Beds.**—Dr. J. B. McMillan will, it is reported, develop valuable clay beds lately found on Town creek.

**Hickory Grove—Flour Mill.**—A 50-barrel flour mill is in course of erection. The Corbett Mill & Machine Co., of Washington, D. C., will erect the machinery.

**Liberty—Shingle Factory.**—H. B. Bowen will put in machinery for manufacturing from 20,000 to 50,000 shingles per day.\*

## TENNESSEE.

**Memphis—Grain Company.**—R. S. Taylor, Thomas T. Duffin, T. J. Hasting, C. C. Hanson and A. A. Arnold have incorporated the R. S. Taylor Grain Co.

**Rockwood—Iron Furnace.**—The Roane Iron Co. expects to put its new iron furnace in blast this week.

## TEXAS.

**Arlington—Water Works.**—The Arlington Water Works Co. has been organized for the purpose of supplying the city with water. Dr. S. C. Page is president; G. F. Thomas, vice-president; A. W. Fife, secretary, and R. F. Davis, treasurer; Thomas Sperance, Woods Collins and A. J. Rogers, directors. The capital stock is \$10,000.

**Brownsville—Water Works.**—A company will probably be organized to construct a system of water works at an estimated cost of \$40,000; supply to be pumped from Rio Grande river to reservoir. The town's population is 8000. William P. Rounds, engineer, can give information.

**Dallas—Garbage Crematory.**—The city will erect a garbage crematory and is now asking for bids. G. W. Crutcher, city secretary, can give information.\*

**Dallas—Mercantile.**—J. L. Rich, of Dallas; W. B. Cook and T. G. Sebrill, of Wylie, have incorporated the Merchants' Mercantile Co. with a capital stock of \$25,000.

**Emporia—Saw Mill.**—M. T. Jones and S. F. Carter, both of Houston, have just completed a new saw mill of from 50,000 to 60,000 feet of lumber per day. The plant is fully equipped with the latest improved machinery and appliances, including a mammoth sizing machine from the Fay & Egan Co. The firm owns a fine body of long-leaf yellow pine lumber, and will make a specialty of cutting railroad bridge timbers, crossties, rough and sized dealers' stock, etc.

**Farmersville—Cotton Company.**—The Farmersville Alliance Cotton Co. has been incorporated with a capital stock of \$5000 by Joshua Gatcher, B. S. King, W. D. Chapman, W. M. Seigler and I. F. Coffey.

**Fort Worth—Nursery.**—H. Roebuck, of Krebs, I. T., contemplates establishing a nursery at Fort Worth.

**Fort Worth—Manufacturing.**—J. F. P. Carera, Frank J. McCarthy and Stephen Casey have in-

incorporated the Carera Manufacturing Co. with a capital stock of \$25,000.

**Hooks—New Machinery.**—The Hooks Lumber Co. is putting new boilers in its lumber mill.

**Houston—Brick and Tile Works.**—The Houston Heights Brick & Tile Co. is putting in its plant at Houston Heights some machinery for pressing brick.

**Houston—Mattress Factory.**—The Houston Heights Spring & Mattress Co. is making considerable improvements at its Houston Heights factory in the way of additional buildings.

**Houston—Manufacturing.**—O. M. Carter, G. W. Beal, D. D. Cooley and T. J. Rountree have incorporated the Houston Heights Manufacturing Co. with a capital stock of \$50,000.

**Mathis—Irrigation Plant.**—An irrigation plant has been planned for an 800-acre farm near Mathis station; horizontal centrifugal pump, stationary engine and boiler of about forty horse-power will be used. Greathouse & Taylor, of Beeville, have received contract. Frank S. Taylor is engineer.

**Orange—Dry-kilns.**—The Litcher & Moore Lumber Co. will rebuild its burned dry-kilns on an enlarged scale. Work on same has commenced.

**Rhine—Flour Mill.**—W. J. Rogers has purchased the Rhine roller mill.

**San Antonio—Capital Increase.**—The San Antonio Brewing Association has amended its charter, increasing its capital stock from \$80,000 to \$100,000.

**Texarkana—Saw and Planing Mill, etc.**—The Central Coal & Coke Co. is building a large planing mill, saw mill, two McPherson kilns, etc., and has also purchased the Ashdown Lumber Co.'s plant, located about twenty miles from Texarkana.

**Velasco—Planing Mill.**—J. G. Slover & Son have purchased the Siddall & Patillo planing-mill plant and want capital to enlarge business, adding hardwood wagon material and turned work to their present planing-mill outfit.

#### VIRGINIA.

**Alexandria—Manufacturing.**—The Potomac Manufacturing Co. has been granted a charter of incorporation, its purpose being to manufacture and sell specialties, etc. The capital stock is \$300,000. A. J. Smith is president; H. A. Davis, vice-president; Chas. M. Smith, secretary, and G. Howlett Davis, treasurer. Wm. M. Smith is local agent.

**Alexandria—Road Improvements.**—Senator Mushback has introduced into the State legislature a bill to allow the county of Alexandria to issue \$100,000 of bonds for road improvements.

**Alexandria—Wood Mill.**—G. W. Jones has recently put in kindling-wood machinery.

**Arch Mills—Flour Mill.**—A flour mill of thirty barrels daily capacity has been completed at Arch Mills. Plant was furnished by the Corbett Mill & Machine Co., of Washington, D. C.

**Coloni Run—Corn Mill.**—Dr. Alfred Leigh is about to erect a complete corn mill, including sheller, six-roller mill, two reels, etc. Machinery has been purchased.

**Falls Church—Wood Mill.**—H. L. Turner has recently purchased kindling-wood machinery.

**Haymarket—Corn and Flour Mill.**—E. H. Janney has built a corn, flour and feed mill.

**Petersburg—Water Works.**—An ordinance has been presented to the city council providing for an issuance of \$80,000 of bonds to be used in raising funds to complete the new water works and reservoir. The mayor can give information.

**Richmond—Buildings, Bridges, etc.**—The Southern Fire-Proof Building Co. has been incorporated for the purpose of building courthouses, iron bridges, water works, etc. The capital stock is to be not less than \$15,000 nor more than \$50,000. Reuben Shirreffs, president; G. G. Smith, secretary and treasurer; and these, together with Jno. T. Saunders, W. J. Ready and H. S. Carter, compose the directors.

**Richmond—Electric Plant.**—An ordinance has been introduced in the city council appropriating \$75,000 in 4 per cent. bonds for the purpose of erecting an electric-light plant to be owned by the city. The ordinance was referred to the finance committee, the chairman of which can be addressed for information.

**Roanoke—Clothing Factory.**—Bonsack Bros., of Bonsack's, Va., have decided to remove their clothing factory to Roanoke. Building has been secured and the change will be made at once. Over 100 women will be employed.

**Saltpetre Cave—Flour Mill.**—A 30-barrel flour mill has been completed in Saltpetre Cave. Plant was furnished by the Corbett Mill & Machinery Co., of Washington, D. C.

**Virgilina—Slate Quarrying.**—A newly discovered vein of roofing slate in Virginia crosses the Virginia and North Carolina State line and the Richmond & Danville Railroad near Virgilina. The slate is free of grit; the vein is over 100 feet wide and stands perpendicular and very easy of access for quarrying. William W. Tannebaker can give information.\*

**West Norfolk—Lumber Mills.**—The West Norfolk Lumber Co. expects to rebuild at once its lumber plant that was destroyed by fire last week.

#### WEST VIRGINIA.

**Ashland (P. O. at McDowell)—Coke Ovens.**—The Ashland Coal & Coke Co. will build 100 beehive coke ovens next spring.\*

**Bayard—Coal Mines, etc.**—The Potomac Coal & Coking Co. has been organized to mine coal and manufacture coke. The capital stock is \$5,000,000.

**Charleston—Paving, etc.**—The Standard Construction Co. has been incorporated to pave streets, construct sewers, etc. The capital stock is \$20,000.

**Charleston—Natural-gas Pipe-line.**—The Charleston Natural Gas Co. has about completed the construction of its pipe-line for conveying natural gas to Charleston from the beds on Kanawha river, ten miles east of the city. The company expects to lay about eighteen or twenty miles of pipe in Charleston within the next two months to supply consumers. W. S. Edwards is the promoter of this company.

**Wheeling—Glass Works.**—A charter has been granted to the Columbus Glass Co., with its principal office in Wheeling, for the manufacture of glass, glassware, etc. The incorporators are F. M. Strong, of Wheeling; Thomas Mears, H. Floto, Lewis E. Smith and William Mann, of Martin's Ferry, Ohio, and the capital stock is placed at \$300,000.

**Wheeling—Ice Factory.**—Henry Schmulbach, Peter Welty and Bernard Klieves, of Wheeling; Samuel S. Bloch and Aaron Bloch, of Pleasant Valley, have incorporated the Arctic Ice & Storage Co. for the purpose of manufacturing ice and transacting a general storage business.

#### BURNED.

**Birmingham, Ala.**—Leonard & Ellis's oil warehouse; loss estimate \$7000.

**Campbellton, Ga.**—Block Bros.' ginhouse and saw mill, two miles from Campbellton.

**Charleston, S. C.**—O'Neill's Opera house; loss estimate \$30,000.

**Colmesneil, Texas.**—The Yellow Pine Hotel and F. B. Roberts's store; loss estimate \$9000.

**Dublin, Ga.**—The Whitehead & Watkins building; loss estimate \$20,000.

**Evant, Texas.**—Sawyer Bros.' grist mill and gin.

**Florence, S. C.**—John P. Coffin's steam laundry; loss about \$10,000.

**Hillsboro, Texas.**—The Hillsboro Opera-house and several business blocks; loss \$200,000.

**Liberty, Miss.**—Dixon & Whitaker's cotton gin, two miles west of Liberty.

**Louisville, Ky.**—E. P. Mooney & Co.'s tannery.

**Mannville, S. C.**—Mrs. R. A. Scarborough's grist mill and gin, near Mannville.

**Milledgeville, Ga.**—The Middle Georgia Mechanical College. Loss estimate \$15,000.

**Mobile, Ala.**—The Edgar C. Nelson Co.'s foundry damaged by fire.

**Norfolk, Va.**—Watkins Bros.' saw mill, on Princess Anne avenue; loss about \$15,000.

**Ruston, La.**—The Ruston College; loss estimate \$5000.

**Simmons.**—Durham & Co.'s cotton warehouse; loss \$10,000.

**Takoma Park, D. C.**—Hotel Watkins; loss estimate \$15,000.

**Tyler, Texas.**—The Cumberland Presbyterian Church; loss estimate \$5000.

#### BUILDING NOTES.

**Austin, Texas—Seminary.**—The Episcopalians will establish a female seminary at Austin. A building has been purchased and will be altered for this purpose. Address Bishop Kinsolving.

**Austin, Texas—Clubhouse.**—The Austin Rod and Gun Club proposes to build a clubhouse near the city. The building committee comprise Messrs. Burroughs, Massie and Johns.

**Baltimore, Md.—Chapel.**—The United Brethren Church will build a chapel 60x32 feet. Address Rev. A. H. Rice.

**Baltimore, Md.—Dwellings.**—Charles Gerwig & Son will erect seven three-story brick houses on Charles street in the northern annex.

**Baltimore, Md.—Dwellings.**—M. A. C. Brady has received permission to erect a row of twenty-seven three-story dwellings on Callow avenue, near Lennox street. The estimated cost aggregates \$70,000.

**Beeville, Texas—School.**—The plans of Mackadoo & Wooley, of San Antonio, have been accepted for the \$20,000 schoolhouse it is proposed to erect at Beeville. Contractors may address J. W. Cook or H. B. Mathias.

**Brunswick, Md.—Storehouse.**—It is reported that a brick building for a storehouse is to be built at once.

**Charleston, S. C.—Warehouse.**—The Charleston Bagging Manufacturing Co. will erect a warehouse in place of the one recently destroyed by fire. Address James S. Murdoch.

**Clarksburg, W. Va.—Hospital.**—The Harrison County Medical Society is fostering the idea of establishing a hospital at Clarksburg. Dr. Morgan will give information.

**Comanche, Texas—School.**—Funds are being raised to erect a school building.

**Comanche, Texas—Storehouse.**—M. Childers, it is reported, will build an iron-front storehouse.

**Galveston, Texas—Store.**—J. P. Lalar will erect a brick storehouse in place of the one he now occupies.

**Greenville, N. C.—Churches.**—Rev. G. F. Smith is interested in a movement to erect two churches in the vicinity of Greenville.

**Griffin, Ga.—Tower.**—The corporation will build a fire alarm tower of brick, stone and terra-cotta. It will be provided with a clock. Andrew J. Bryan & Co., of Atlanta, Ga., are architects.

**Hagerstown, Md.—Church.**—The congregation of the Church of God will erect a church edifice. The money for the building has been partly raised. Address Rev. George W. Sailhamer.

**Haines City, Fla.—Church.**—The Episcopalians are preparing to erect a new church.

**Houston, Texas—School.**—The plans of E. T. Heiner, of Houston, have been accepted for the new school to cost \$75,000.

**Knoxville, Tenn.—Hospital.**—The hospital to be built by the Tennessee Medical College is to cost \$60,000. Plans are wanted from architects, who may correspond with C. E. Ristine, registrar.

**Laurel, Md.—Hotel.**—It is reported that the Gordon residence has been sold to Washington parties who will remodel it into a hotel. M. Duffy is one of the purchasers.

**Mount Holly, N. C.—Storehouses.**—W. T. Love will erect a brick block for storehouses to replace the one recently burned. Mrs. Henderson will also build a brick block.

**Nashville, Tenn.—Penitentiary.**—The city has appropriated \$5000 to begin work on a penitentiary. Address City Councilman Sharenberger.

**Richmond, Va.—Armory.**—The city council has decided to issue \$25,000 in bonds to build an armory for the Richmond Howitzers. Address City Engineer Cutshaw.

**Richmond, Va.—Armory.**—The city council will issue \$7500 in bonds to build an armory for colored troops. Address City Engineer Cutshaw.

**Rock Hill, S. C.—College Addition.**—The trustees of the Winthrop Normal College are to have plans prepared for a dormitory building to accommodate 500 pupils. Address the board of trustees.

#### RAILROAD CONSTRUCTION.

##### Railroads.

**Bentonville, Ark.**—The Bentonville, Fort Gibson & Southwestern Railroad Co. has been incorporated to build a line twenty-five miles long from Bentonville to a point in the Indian Territory. The capital is \$250,000. James Bohart and George H. Moore, of Bentonville, are among the incorporators.

**Brazoria, Texas.**—Citizens of Brazoria are agitating the project of raising a fund to build an extension of the International & Great Northern road from Brazoria to Velasco.

**Charleston, W. Va.**—It is reported that the Chesapeake & Ohio is about to begin the construction of its branch along the Guyandotte river. Decatur Axtell, of Richmond, can inform.

**Charleston, W. Va.**—The Belva & Elk River Railroad Co., recently chartered, will make several extensions of the lumber road now built from Belva, W. Va., for a distance of fourteen miles. C. H. Eaton, of the Gauley Lumber Co. at Belva, W. Va., is interested.

**Chattanooga, Tenn.**—President T. J. Nicholl, of the Chattanooga Western, writes that contracts will be let for building thirteen miles of the road to Signal mountain and nine miles to Hixon, Tenn., in about ninety days. A steel bridge is to be built over the Tennessee river.

**Kingston, Tenn.**—It is reported that the Fairmount Valley Railroad Co. is raising funds to build a road from Cartersville, Ga., to Middlesboro, Ky., by way of Cleveland and Kingston, Tenn. They expect to have a connection with the Nashville & Knoxville, now being built. Messrs. Aubury and Smith, of Cartersville, are interested.

**Laurel, Md.**—It is reported that work on the Washington-Baltimore electric line has been commenced near Laurel. Several carloads of rails have been delivered to the contractors. It is stated that the route will be as direct as possible, and will be 100 feet wide, with twenty-five feet for tracks, fifteen feet for walk and the rest for a driveway. David M. Newbold, of Baltimore, is president, and Francis H. Hambleton, chief engineer. The line is to be about thirty-two miles long.

**Little Rock, Ark.**—The Mississippi & Little Rock Railway Co. will try to raise funds to build the line into Little Rock. It is stated that twenty-seven miles of the road between Duncan, on the Arkansas Midland, and Aurich, on the Cotton Belt system, are completed. It is estimated that \$150,000 is needed to finish the thirty miles partly

graded on the Little Rock extension. Address Z. Ward, president.

**Springfield, Mo.**—Vice-President Martin and several railroad contractors are making a trip over the proposed route of the Lake Superior, Southwestern & Gulf road, between Little Rock, Ark., and Springfield. Two parties of surveyors are running lines.

**St. Charles, Mo.**—E. F. Becker, one of the incorporators of the Terminal Railway of St. Charles, states it is to be an independent line in the county of St. Charles. It has not been decided when construction work will begin. Several capitalists are in the company.

**Sumter, S. C.**—The Sumter, Lake City & Conway Railroad Co. has begun grading a part of its line. Henry W. Mackey is president. [This company is composed of colored men who personally have no funds. It is intimated by them that other parties who are responsible are using them to conceal the true identity of the company. No stock has ever been subscribed or bonds issued.—Ed.]

**Thomasville, Ga.**—The Savannah, Florida & Western has decided to lay a number of sidetracks in the vicinity of the city on property recently purchased. R. G. Fleming, at Savannah, is superintendent.

##### Street Railways.

**Kansas City, Mo.**—The Merriam Park, Kansas City & Rosedale electric road is to be partly completed in the spring. Funds are on hand to begin building in a few weeks. A. A. Pearson may be addressed.

**Kirkwood, Mo.**—The St. Louis, Kirkwood & Meramec Highland Railway Co. has been incorporated to build a line from St. Louis to Kirkwood, in the suburbs. It will be about six miles long.

**New Berne, N. C.**—It is reported that arrangements have been made to complete the New Berne electric railway and that a construction contract has been signed. R. P. Williams is interested.

**Norfolk, Va.**—The directors of the Berkley Street Railway Co. have decided to place electric motors on the line this year, and to make the necessary changes for this purpose. T. H. Lyon is president and Will Tillotson, manager.

**Orlando, Fla.**—The Orlando Street Railway Co., it is stated, has secured funds to build the electric road projected through the town. R. E. Green may be addressed.

#### MACHINERY WANTED

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

**Amalgamator.**—E. T. Whatley, superintendent Yonah mines, Santee, Ga., wants to purchase an amalgamator that will attach to stamp mill and concentrator.

**Barbed Wire.**—J. B. Brewton, Alberton, Ala., wants six miles of barbed wire for fencing.

**Boiler.**—The Oakland Manufacturing Co., of Oakland, Md., postoffice at Haight, Md., is now procuring estimates on a boiler. Address Nicholas W. Steele, general manager.

**Boiler and Engines.**—Wanted, a 400 horse-power and a 600 horse-power engine and boilers to suit; second-hand preferred if in good condition. Address Engines, care MANUFACTURERS' RECORD.

**Box Factory.**—Machinery for a box factory is wanted. Address B. B. Waddell, Helena, Ark.

**Brick Machinery.**—J. N. Wheeler, Warren, Ark., wants information on brick manufacture and illustrated price-lists of machinery for same.

**Canning Machinery.**—Machinery for canning is wanted. Address B. B. Waddell, Helena, Ark.

**Chlorinator.**—E. T. Whatley, superintendent Yonah mines, Santee, Ga., wants to purchase a chlorinator (barrel process).

**Concentrator.**—E. T. Whatley, superintendent Yonah mines, Santee, Ga., wants to purchase a concentrator, one to concentrate sulphuric gold ore.

**Conveying Machinery.**—The Land Pebble Phosphate Co., Pebble, Fla., wants grain shutes, such as are used to load cars with grain from buildings.

**Cotton-mill Machinery.**—Machinery for making cotton bats is wanted. Address B. B. Waddell, Helena, Ark.

**Crematory.**—Sealed bids will be received until January 35, 1894, at the office of G. W. Crutcher, secretary of the city of Dallas, Texas, for the building of a crematory of seventy-five cubic yards capacity, guaranteed to thoroughly cremate



night soil and all kinds of garbage. Plans and specifications to accompany the bids for building same.

**Dynamo.**—R. B. Corbett, 622 Rialto Building, St. Louis, Mo., wants to purchase a second-hand dynamo of 30, 50, 75, 100-light capacity for cash.

**Dynamo.**—The Merriam Park, Rosedale & Kansas City Electric Railroad wants to buy a dynamo of not less than 500 volts capacity. Address A. A. Pearson, president, Kansas City, Mo.

**Electric Plant.**—A. J. Petter, 917 South Fourth street, Paducah, Ky., wants information concerning electric-light and power plant, cost of machinery, etc.

**Gold-crushing Mill.**—E. T. Whatley, superintendent Yonah mines, Santee, Ga., wants to purchase a five-stamp gold mill.

**Ice Machinery.**—A. J. Petter, 917 South Fourth street, Paducah, Ky., wants information on ice machinery, cost of same, etc.

**Laundry Machinery.**—Machinery for a laundry is wanted. Address B. B. Waddell, Helena, Ark.

**Machine Shop.**—A. J. Petter, 917 South Fourth street, Paducah, Ky., wants information and prices concerning machinery for machine shops.

**Ore Washer.**—The Etna Furnace Co., Etna, Ga., wants an ore washer.

**Planing Mill.**—J. Flemans, Alberton, Ala., wants a planing mill.

**Pulleys, etc.**—The Oakland Manufacturing Co., Oakland, Md., postoffice at Haight, Md., is procuring estimates on pulleys, shafting, hangers, etc. Address Nicholas W. Steele, general manager.

**Refining Machinery.**—The Southern Refinery Co., 130 Commerce street, Montgomery, Ala., will want refining machinery next July; E. W. Meneffe, secretary and treasurer.

**Roasting Furnace.**—E. T. Whatley, superintendent Yonah mines, Santee, Ga., wants to purchase or erect a furnace for roasting ore.

**Rolling-mill Machinery.**—Wanted, a second-hand sheet train with pinions, also muck tr in and squeezers, one pair muck shears, one pair sheet-squaring shears, eleven feet, and one roll-turning lathe. Address Ohio, care MANUFACTURERS' RECORD.

**Saw Mill.**—A saw mill is wanted. Address J. B. Brewton, Alberton, Ala.

**Sewer-pipe Machinery.**—J. N. Wheeler, Warren, Ark., wants information on the manufacture of sewer pipe and illustrated price lists of the necessary machinery.

**Shingle Machine.**—H. B. Bowen, Liberty, S. C., is in the market for a shingle machine, new or second-hand, of 20,000 to 50,000 shingles capacity daily.

**Slate Machinery.**—William M. Tannebaker, Virginia, Va., wants to correspond with manufacturers of machinery used in manufacturing slate pencils and roofing slate.

**Spring-bed Machinery.**—C. P. Miller, Savannah, Ga., wants machinery for manufacturing spring beds.

**Stave Machinery.**—R. F. Wallis, Pisgah, W. Va., wants the addresses of manufacturers of stave machinery.

**Steam Shovel.**—R. M. Quigley & Co., 115 North Eighth street, St. Louis, Mo., want to buy a good steam shovel; must be in A1 repair; one and a-quarter-yard dipper preferred. Give make, weight, size and price f. o. b. Baton Rouge, La.

**Street Cars.**—The Merriam Park, Rosedale & Kansas City Electric Railroad wants cars for street railway. Address A. A. Pearson, president, Kansas City, Mo.

**Water Wheel.**—E. T. Whatley, superintendent Yonah mines, Santee, Ga., wants to purchase a water wheel.

**Water Works.**—The city of Poplar Bluff, Mo., will shortly advertise for bids on the construction of water works. Address M. C. Horton, mayor.

**Water Works.**—Sealed bids will be received until February 1 by the city of Bolivar, Mo., for constructing a complete system of water works. Specifications may be obtained on application to C. H. Skinken, city clerk. R. M. Dysart is mayor, and Chas. F. Sturtevant, of St. Louis, is engineer.

**Woodenware Machinery.**—Charles S. Conner, 64 Water street, Norfolk, Va., wants prices on machinery for making wooden bread trays.

**Woolen-mill Machinery.**—The Oakland Manufacturing Co., of Oakland, Md., postoffice at Haight, Md., is now procuring estimates on ten sets woolen cards, sixty inches wide, eight self-acting mules, 450 spindles each, forty broad looms (Knowles), finishing machinery of all kinds, shoddy-pickers, burr-pickers, lumpers, greasy-pickers, etc. Address Nicholas W. Steele, general manager.

The Land Pebble Phosphate Co., of Pebble, Fla., conveys its material in cars from house to house on a railroad track and wants a machine to register these cars, so that at the end of the day it will be seen how many have passed a given point. The machine must be one that cannot be tampered with. Address B. H. Heyward, superintendent.

E. C. Healy, of 617 A street N. E., Washington, D. C., wants catalogues from the leading firms that make a specialty of supplying churches with carpets, church furniture and other interior furnishings.

An agency for gas engines is wanted at Helena, Ark. Address B. B. Waddell.

Boyd & Alender, of Steel Creek, N. C., want material used in manufacturing brooms; also a man for tying.

The Ashland Coal & Coke Co., McDowell, W. Va., wants prices on fire-brick for coke ovens.

R. F. Wallis, of Pisgah, W. Va., wants addresses of dealers in staves, hoops, etc.

### TRADE NOTES.

THE life car aerial hook and ladder trucks which the Gleason & Bailey Manufacturing Co., of Seneca Falls, N. Y., control, are rapidly taking the place of the old style screw raising aerials. Among recent sales is one to Cleveland, Ohio.

WORKING full time and full capacity, and behind on their deliveries, is the gratifying report furnished by the Clayton Air Compressor Works, of 43 Dey street, New York, as to its shops in Brooklyn. In the prevailing business depression this speaks volumes for the excellence of the air compressors built by this company. It has recently taken out several valuable patents on a triple-compound high-pressure air or gas compressor, used largely by manufacturers of carbonic-acid gas.

THE Jeffrey Manufacturing Co., of Columbus, Ohio, has issued its new catalogue of machinery for 1894. This concern manufactures chain belting, elevating and conveying machinery, driving belts for the handling of materials of all kinds, and will endeavor during the coming year to keep its product up to that high standard which it has attained in the past. The company's catalogue is quite comprehensive, being fully illustrated and giving price-lists of all machinery in its line. A complete illustrated catalogue of chain appliances is also issued by the company.

THE Cutler Manufacturing Co., of Rochester, N. Y., installed four United States mail chutes and boxes in the administration building at the Columbian Exposition, and they not only proved a great convenience and advantage to the various offices of the exposition, but were very largely used by the public. Near the close of the fair the director-general wrote as follows to the Cutler Company: "It would accommodate us if your company could make it convenient to allow the chutes to remain for a month or two after the close of the exposition, while we are engaged in closing our work."

THE Nordyke & Marmon Co., of Indianapolis, Ind., has issued a "Book on Mills and Milling," being a complete illustrated and descriptive price-list of its portable corn, flour, grist and other mills. This concern pays especial attention to all kinds of portable mills for farms, plantations, etc., and has received the highest awards for excellence at many fairs, etc., including the St. Louis, Cincinnati, New Orleans and Indianapolis fairs and expositions. The portable mills shown in the company's book are all well established and have given satisfaction to users for years, as thousands of them have testified. These mills are all warranted to be as represented, well made of the best material and by the most skilled workmanship aided by special machinery, and contain the latest practical improvements. This "Book on Mills and Milling" is furnished free to those interested.

THE United States cruiser "Columbia," built by the Wm. Cramp & Sons Ship & Engine Building Co., is said to have made the fastest time ever made by a ship of her size. This vessel has a steam capstan windlass made by the American Ship Windlass Co., of Providence, R. I., and her record for handling her anchors and chains with this windlass is about equal to her record for speed. She was lying in fifteen fathoms of water with her four chains and anchors out, when the order was given to take the anchors and cat them on the cat head. In less than fifteen minutes from the time the order was given the four anchors had been taken and were on the cat head. This is probably the shortest time on record in which four anchors and chains of the size the "Columbia" carries were even taken and "catted," and it only confirms what practical experts have testified to for many years, that the "Providence" windlasses are among the most efficient of any that are built in the world.

ATTENTION is called to the advertisement of the W. E. Caldwell Co., of Louisville, Ky., in this issue. This concern makes a specialty of the manufacture of Louisiana red cypress tanks, and they also manufacture a patent sectional tower for the support of tanks. These towers they build of all iron, and also of wood and iron combined. The all-iron tower is largely used in connection with automatic-sprinkler plants for fire protection, etc., and also for water-works system for small towns and villages. The company furnishes the combined wood and iron tower principally to florists, gardeners and to parties desir-

ing elevated tanks for private grounds. As these towers, besides being strong and durable, are of neat design and of good proportion, they make handsome structures and are an ornament to any grounds. This company claims that it does the largest business in the tank line done in the country, which, they say, is due to their furnishing only good material and workmanship in all cases and the lowest possible prices in proportion. A catalogue and price-list will be mailed to any address, also their reference sheet.

THE Corbett Mill & Machine Co., milling and mechanical engineers and furnishers of general machinery and supplies, of Washington, D. C., has just completed a 30-barrel flour mill at Saltpetre Cave, Va.; a 30-barrel flour mill at Arch Mills, Va.; a 50-barrel flour mill at Hickory Grove, S. C. A number of other mills have also been started, which are now giving first-class results. The company has also furnished kindling-wood machinery to Tavenner Bros., Georgetown, D. C.; G. W. Jones, Alexandria, Va.; J. R. Zimmerman, Alexandria, Va.; H. L. Turner, Falls Church, Va.; and to Dr. Alfred Leigh, Calvin Run, Va., has sold a complete corn mill, including a Western corn sheller, Norrish six roller mill, two reels, feed stone, scales, etc. A 25-barrel flour mill and a complete corn and feed mill, including water wheel, has also been started for Maj. E. H. Janney, Haymarket, Va., and a twelve horse-power vertical boiler has been furnished to J. Birkner, Washington, D. C. The Corbett Company has also received orders for two 30x8 and two 30x9 hot-water boilers and a twenty horse-power boiler for Zoological Park, Washington, D. C. The Corbett Mill & Machine Co. is engaged in preparing a new price-list of power-transmitting machinery, which will be furnished to interested parties when ready.

THE Westfield Creel Co., of Westfield, Mass., has been incorporated with a capital of \$125,000; William Warren is president, and John T. Way, treasurer. The following are the directors: William Warren, president W. Warren Thread Works, Westfield, Mass.; W. P. Warren, president of Foster Machine Co., Westfield, Mass.; John W. Foster, superintendent Foster Machine Co., Westfield, Mass.; A. F. Lilley, attorney, Westfield, Mass.; A. M. Goodale, agent Boston Manufacturing Co., Waltham, Mass.; J. W. Cumcock, agent Dwight Manufacturing Co., Chicopee, Mass.; S. N. Bourne, agent Stark Mills, Manchester, N. H.; Robert Redford, agent Arlington Mills, Lawrence, Mass.; H. F. Lippitt, agent Social Mills, Woonsocket, R. I. This company has recently patented a new method and creel for warping yarn direct from cones or tubes, thus doing away with spooling, the yarn being taken from the bobbin and wound onto cones or tubes, those being put into the creel, and the yarn is run from them onto a warper, same as from spools. The warper can be run from 30 to 50 per cent faster, and fill two to four beams with one tying-in of creel—the yarn drawing off over the end of cones, or can use old creel and draw from skewers, winding onto same direct. With this system there are, it is said, less knots, less stretch, much less waste, less tying-in of yarn, increased production of the looms, better cloth, no spools to buy or repair. The system is used in several large mills, and is found to have many excellent points of merit and effecting quite a saving.

THE J. R. Alsing Co., of New York city, patentees, manufacturers and agents for crushing, grinding and pulverizing machinery for all kinds of materials, has received the following letter in regard to the Abbe mill from the Chattanooga Medicine Co., of Chattanooga, Tenn.: "For fifteen years we have been trying to find a mill that would do satisfactory grinding of herbs that we use in compounding our medicines. We could find mills and millers that could give us part of the product that was all right, but essential parts would be imperfectly ground, and 'shrinkage' would be 20 to 25 per cent. A short time ago we were induced to try an Abbe mill. To say that we are pleased does not half express it. We are delighted. The mill grinds all of the material exactly as we want it ground, there is no shrinkage, and the grinding capacity of the mill is about three times greater than we have had before." The following letter was received a few days after the above: "We have your favor of the 22d inst. We have no objections to the use of our letter of the 20th inst. as a reference, except that our statement of the capacity of the mill being three times greater than any other heretofore used by us. That statement might be misleading to anyone except ourselves. We have tried other mills that would take the material as fast as the Abbe, but the product had to be bolted and coarser parts reground two or three times, finally leaving a portion which had to be rejected, and which we called shrinkage. The Abbe mill does the whole thing at one feeding, requires no bolting, and the shrinkage is nominal. This gives us about three times as much finished product per day from the Abbe mill as we got from other mills. A very satisfactory item in connection with the Abbe mill is that we are grinding a lot of the shrinkage from the old mill, such as had not been destroyed, which will amount to the cost of the Abbe mill."

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ROCK-EMERY millstones continue to grow in favor as grinders. The superior qualities of those put on the market by the Sturtevant Mill Co. are being generally recognized.	
GRAHAM COUNTY, N. C., is now ready to receive bids on her new \$12,000 courthouse; time open for bids till February 1, 1894. For plans and specifications of the same address or call on W. F. Mauney, register of deeds of Graham county, N. C. The county of Graham also wants to place the bonds for the same, bonds to run thirty years at not more than 6 per cent. interest. Call on or address the undersigned for any further information. W. F. Mauney, clerk ex-officio to the board of county commissioners, Graham county, N. C.	

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